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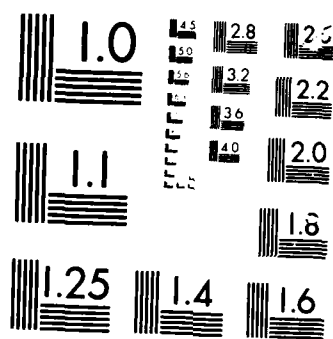
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Meeting Report

INTERNATIONAL CONFERENCE ON DEFENSE COOPERATION

January 31 — February 1, 1980
at the
Washington Hilton Hotel
WASHINGTON, D. C.

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AMERICAN DEFENSE PREPAREDNESS ASSOCIATION

National Headquarters 1700 N. Moore St., Arlington, VA 22209

AMERICAN DEFENSE PREPAREDNESS ASSOCIATION

PROCEEDINGS
OF THE
INTERNATIONAL CONFERENCE ON
DEFENSE COOPERATION

Program Co-Chairmen:

The Honorable Barry Shillito, Former Assistant
Secretary of Defense and now Chairman, Teledyne-
International and Chairman of the ADPA Security
Assistance Division

Dr. Vitalij Garber, Deputy Under Secretary of
Defense (International Programs and Technology)

Washington Hilton Hotel
Washington, D.C.

January 31 - February 1, 1980

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INTERNATIONAL CONFERENCE ON DEFENSE COOPERATION
FIFTH ANNUAL EXECUTIVE SEMINAR
ON
INTERNATIONAL SECURITY AFFAIRS

SESSION I
OVERVIEW

(NOTE: Due to technical difficulties, this session was not recorded verbatim at the Conference.)

Barry Shillito (prepared remarks)

Welcome to the ADPA's Fifth Annual Executive Seminar on International Security Affairs. I believe that we have an outstanding program which we will each find stimulating and beneficial. We should find these sessions dealing with Allied cooperation and, more importantly, how to get on with overall preparedness in our mutual interest most timely. Many would say the luxury of continued delay in order to discuss concepts as to how we should work together is no longer possible. It's time for action.

Three years ago, at a similar session of the ADPA, I mentioned that my involvement in the issues of International Defense Cooperation, particularly as regard RSI, went back over a period of 15-plus years. At that time, I covered many of my frustrations and many of the fundamental problems that must be resolved in order for International Defense Cooperation to be effective. I'll not go over this litany of issues which have been discussed many times since. Almost none have been resolved.

Without question, Allied cooperation in the interest of our collective capability is theoretically sound. Many would say this is our only economic alternative. Without question, a few very small steps in the direction of cooperation in the past few years have been taken. While some progress has been made, many of us, possibly most of us, are still very frustrated and concerned. Many believe that many of our publicized successes would have happened anyway by creating the environment to allow Allied companies to work together with minimal government guidance or intervention. Many of us do not believe that individually and/or collectively we are moving fast enough to offset the power of a potential enemy that many of us have known for decades, based on that enemy's history and pronouncements, is desirous of destroying our way of life. Possibly recent events may be the best single thing to have happened to the free world in several decades. This has caused a number of persons in key positions in most of our governments to discover History 101. This applies to both of our U. S. political parties and even our Press.

By the way, an interesting, brief, partial recap of Russian History 101 is contained in the Georgetown University Allied Interdependence Newsletter No. 18 of 18 January, which is worth reading. At any rate, most fortunately our populations are becoming concerned and rightfully are demanding action from their leaders.

As we consider the appraisal of our International Defense Cooperation, it would therefore appear that it's time for us to be very candid.

Our keynote speaker some time ago said, "We have no common NATO requirement. Each government develops its own military requirements as though it will be alone one day on the battlefield with the Russians." I frankly don't see adequate actions taking place to change this. Each NATO country still develops its military requirements separately. We are not operating effectively together, and in spite of our combined expenditures being greater than the Soviets, most believe we are not effectively using these combined funds, and that our readiness has not improved. In fact, it has suffered.

Ambassador Robert W. Komer (summarized remarks)

The Honorable Robert W. Komer, Undersecretary of Defense for Policy, stressed that while everyone is agreed about what is to be done to meet the enemy threat, cooperation is poor because there has been an inadequate grasp of realities. It was noted, in particular, that (1) U. S. defense outlays are only beginning to attain 5 percent of our GNP; (2) there is no cohesion in the design of new tanks within the Alliance; (3) continuing OPEC oil price escalations are undermining the West worse than the Russian threat does; (4) NATO military cost burdens are not being shared equitably; (5) although the Western coalition is spending more than the Warsaw Pact on its armaments, the Soviet Union itself is investing more in research, development and physical plant - in fact, up to 90 percent more. Although at least two countries (Bulgaria and Hungary) constitute an economic liability to the U.S.S.R., the entire Bloc is a monolith which is integrated in terms of the interoperability of its weapons and weapon systems.

SESSION II

CURRENT APPRAISAL OF
INTERNATIONAL DEFENSE COOPERATIONBarry Shillito

In introducing this Panel Session, I would like to make a few brief comments. First of all, each of the Panel members was sent a copy of Allied Interdependence Newsletter No. 17 prepared by The Center for Strategic and International Studies. This Newsletter, in which Dr. Tom Callaghan, Director of this Study, played a major role developing, does an excellent job of bringing into focus many of the major issues. I hope that those of you who have not had the opportunity to peruse this document do so, and that you also read his companion Newsletter No. 18, which I mentioned earlier. It came out after the Soviet invasion of Afghanistan.

As mentioned in introducing Ambassador Komer earlier, it is time for all of us to be very candid in our overall national security best interests. Without covering the issues as regard our progress or lack of progress to date, a few points might be made in introducing this Panel:

Many in the U.S. believe that the U.S. is trying to reinforce a NATO Europe that is not committed to reinforcing itself. Many Europeans possibly question the motives of those Americans who hold this belief.

NATO Industry has the perception that while the Governments have made great policy pronouncements on RSI, and much has been discussed concerning its merits, there are very few positive results. In other words, collective readiness has not improved.

Three years ago, it was stated that the acquisition process in Europe is essentially cooperation. The acquisition process in the U.S. is competitive. The Europeans felt that this difference in cooperation vs. competition would impede RSI. For example: in teaming arrangements, Europeans say they sometimes (maybe often) find themselves teaming with a U.S. prime who eventually loses in U.S. competition, yet they are their nation's selected producers. There is a general feeling that this must be immediately resolved if we are truly serious.

There continues a great emphasis and discussion on NATO standardization. At the same time, we still haven't been able to accomplish this in many logical areas within the U.S. Services. Interoperability, which is more important than standardization, continues to be neglected.

Many years ago, Dean Acheson acknowledged, "While we Americans talked of balanced collective forces, our own military planning and budgeting were undertaken aloof and apart from Europe." This problem continues to this day. Why can't we resolve fundamental matters such as this?

While some work has been done to establish coordinated NATO mission area need statements (primarily among the big 4), the movement of NATO Industry into this process is not well demonstrated or known.

The U.S. policy of arms restraint, in addition to being largely ineffective in reducing worldwide armaments expenditures and, hence, being a major obstacle to NATO RSI, has served to weaken and/or alienate our potential friends with no offsetting effect on our potential enemies. It would appear that this policy, too, deserves an immediate relook in the interest of our collective security.

Now, standardization, while desirable and theoretically sound, has proven hard to attain. In fact, the results of our collective efforts after decades of work are primarily words, attractive words. The Warsaw Pact, as Bob Komer says, doesn't have this problem and some of us believe that our problem is such that our total security may be adversely affected by the logical but myopic desire to attain the standardization element of international defense cooperation.

We sometimes wonder, therefore, if we might not be well advised to push forward on our individual national options as rapidly as possible in our collective best interest. At the same time, we could continue to do everything possible to develop all possible incentives to standardize, we could insist on interoperability as a part of our individual requirements, we could develop to maximize the benefits of our collective R&D and work towards insuring minimum constraints in allowing our industries to work with and for each other in attempting to minimize the divergence of our national and collective capabilities but move on, and rapidly.

I think back to the period post the Korean War. At that time, a lot of thinking people in this country were saying that the United States should spend somewhere around 10 percent of its GNP as long as there remained a U.S.S.R. threat. Now the Soviet has not changed. We have changed. We have shifted our priorities. The U.S. now spends about 5-1/2 percent of its GNP on national security and, as Ambassador Komer said, or inferred, this is significantly greater than any of our allies. Well, possibly with the exception of Israel and Taiwan.

So while the above is a suggested approach in order to allow us to get on with our national security efforts, this

Panel and your areas of question might recognize a point made by the Senate Armed Services Committee last May when that Committee said, "Better ways to accomplish rationalization, standardization, interoperability must be found," and they asked the question, "What better ways should we pursue in order to accomplish NATO RSI or improve our collective security?"

Our first panelist is Doctor Walter LaBerge, an industrialist, a scientist, dedicated American. He has been involved, interestingly, one of the few people involved in each of our military services; the Navy, the Air Force, Army and NATO, and, of course, now he is one of our senior people on the scientific side in the Office of the Secretary of Defense.

We are honored to have as our first Panelist, Doctor Walter LeBerge.

Doctor Walter LaBerge

Thank you, Barry. I apologize to you for such a dramatic late entrance, although if I had heard Barry Shillito's speech I would have believed I was at the wrong meeting. Barry, you sound to me much like a political year candidate on the outside trying to get in by saying that everything that is going on is all wrong and I would believe the position you presented is about as extreme as some of the candidates I have been listening to lately.

That is an intemperate remark. Let me give you what Bill Perry would say to you, because that is who you came to hear.

The reason I am late is that I did meet Bill on the steps of the Pentagon and he wished to apologize to you. Bill did something that probably none of you yourselves are willing to do, and that was to take the overnight airplane from California to get back here to see you, and there are very few of us, at our ages, that respond very well to that kind of punishment and Bill did that. He was, however, pre-empted yesterday by a request that he go to an out-of-the-building meeting that he was obliged to go to and he did ask me to represent his thoughts today, but to promise to you that tomorrow he would pick up, personally, questions that you had at the end of his presentation at 11:30. He also wished for me to extend his apologies to the members of the Panel, who are very good friends, as well as being business associates, and to express his apologies for not being here, but again, to say that he would be with you tomorrow.

Let me talk about what Bill might have said had he been here. I think what he would say is that the inevitable seems to be happening and that it seems to be happening somewhat accelerated by the efforts of the people that are here. I think

that he would believe that international cooperation in this time that we live in is, in fact, inevitable and that slowly this is becoming recognized by all of the people who control the process by which we work: industry, which has to make it work; the Government, which offers suggestions as to how to make it work; and the legislatures which, by their actions, allow the framework to be modified or changed to permit things to go forward. I think that Bill would argue that we are, in fact, moving reasonably rapidly by the standards of what a bureaucracy can do.

Now I would argue to you, Barry, that you cannot take the corporation that you have and change it as rapidly as you recommend me to change the whole industrial complex of all the nations. Things have to happen by the various people in the organizations getting used to working together and making things happen and I don't believe General Motors or any of the other large corporations go through revolutions in how they work. They adapt by starting to work slowly to understand what is important to make the changes and to make them happen, and I would believe that any even-handed person reviewing the four or five years would admit that a substantial amount of progress has been made and that the progress is continuing and it is moving towards a useful end.

Now, first in the things which I believe have happened is that there is a recognition of the need. I don't believe any politician here - myself, Carl Damm, anybody - can make things happen unless there is a universal recognition of the need for something to happen. That is what democracy is all about. Therefore, the user has to essentially demand, by his understanding of this need, that this cooperation come about. We are doing exercises now at a level in the field that we have never done before. We have German divisions in the U.S. corps. We have reinforcement exercises where nations work together. We have air forces cooperating with ground forces in a way that has not been done before, and lest you not believe me, do me the courtesy of at least talking to the field commanders to find out what is going on.

The work which drives this whole Cooperation business, namely the desire on the part of the military to have an effective fighting force, is, in fact, going on, I believe, at a very much accelerated pace. Substantial staff talks are taking place now that have never taken place before. The United States with all of its allies individually, the European allies individually with each other are talking together much more closely than they ever have been before. The consultations within the NATO structure are happening in a way that we agonize about because we do not always get agreement, but we have consultation on very important issues in a way that we have not had before. I really believe that that leads to a mutual trust in a way that cannot happen any other way.

I think there is a recognition of the need in the basic economics. All of our nations would like to go separately, because that is the easiest, most straightforward way to go. All of the nations, I believe, recognize that some number of systems are, in fact, so expensive to develop that it is just imprudent to do it in a way other than collectively. I will talk a moment about that later, but that recognition of the basic economics takes a while to happen. I don't think any of your companies instantaneously change their way of doing business. You work at something, you find it is necessary, you grope for how to make it happen. This basic economics of cooperation, I think, is getting to be much better understood.

During this period we are talking about a number of bureaucratic changes that have taken place which makes the process go more easily. Washington is a bureaucratic town, but so are the capitals of all of the rest of our cities and that is very good. A bureaucracy is the organizational mechanism by which governments make things happen. To say something is bureaucratic, I believe, is wrong. You need to get the bureaucracy working on the thing you want to have happen. You need to make a bureaucracy that gets the thing that you want to have come about to get priority. We have done this in the NATO structure: the NAPR, which allows integrated planning of when we are going to do things; the periodic armaments planning system; the NIAG; all are much stronger now than they have been before.

The IEPG, as an out-of-NATO group, is much stronger. Not as strong as some of us would like to see it, far stronger than it has been before collecting people together to go work on programs. It doesn't change instantaneously, but its vector, I believe, is positive.

We are, in fact, working on air-to-air missiles, not only in the family of weapons that is so well publicized, but also within an IEPG structure where the Europeans have decided this is something that they truly wish to do and they are not being forced by an America into doing it. It is their collective belief and it happens to coincide with the NATO organization and with what the United States would like to see happen. The same way one is working on a third generation anti-tank guided missile, in a cooperative effort where the Europeans have collectively gotten together and said, "Yes, that thing that the United States wishes to see doing is in our limited interest, as well as in the interest of the Alliance as a whole." So the bureaucracies are getting together, I believe, in fact, to do things that are reasonable.

I would also contend there has been real progress, that a year ago - with several nice ladies in the audience, I will not use the term that I had originally thought to use - but there

was considerable carping and complaining about whether or not one would, in fact, do the 120 millimeter gun, the roll-on, the F-16, the AWACS, the A9L. All of those are, in fact, going to happen. Some of them very slowly. Hans Eberhard will describe how slowly. But it is, in fact, going to happen. I think one needs to realistically look at the fact that a number of things that are useful are happening because people believe they should.

Lastly, I would like to relay Bill's comments on mutual trust. There is a mutual trust between the Komers, the Martres, the Eberhards and the Perrys. That occurs not because people are altruistic world savers. It occurs because a set of hard-headed businessmen have gotten together and argued long enough to believe that they have a common interest and a common set of things that they can do to achieve that interest.

I think one of Bill's greatest appreciations is the fact that people have now gotten in the management of international cooperation together in a way where they can trust each other because they know each other and believe in each other.

I would not like to leave you believing either Bill or I think that we are happy with the progress, as I would believe Barry is not happy with the progress of his Corporation. At the time he becomes content with how well his P & L is going, he ought to be fired. At the time I become content with how things are going, I ought to be fired. But I would not like to leave you believing the problems are greater than the progress, and I will work the problems but I need to have an environment which is different from an election year in the United States, where everybody who is at the microphone is complaining about the system, because I believe we do need to work cooperatively and that it does take a little time.

Thank you.

Barry Shillito

Thank you very much, Walt. Indeed we do need to work cooperatively and let me assure you that I have no political aspirations.

I would like to make a couple of other comments. We are going to handle the Q & A's now as we get to the wind-up of our individual panelists, such that you can submit these in writing and, again, we will also take questions and that sort of thing from the floor. So keep that in mind.

Next, I want to mention that I am going to apologize to our panelists, particularly our NATO allied panelists, for the

brevity of my introductions, because I would like to have as much time as we can to concentrate on the questions and answers and we do have an outstanding group of people with us this morning.

Our next panelist is the Deputy Chief Scientific Advisor for the Ministry of Defense, the United Kingdom. He is a senior British scientist. He has been involved in many scientific management positions through his illustrious career. He has particularly had superb research experience that has tied to some of the greatest achievements that many of us have benefited from as far as turbine engines are concerned. He has been a scientific and technical counselor for the British Embassy here in Washington. He has been a lecturer here in Washington and elsewhere in the world, has many recognitions, many awards.

We are indeed honored to have Mr. James F. Barnes as our next panelist.

James F. Barnes

Mr. Shillito, ladies and gentlemen, it is indeed a pleasure to be able to participate with the United States and with my German and French friends as a member of the panel. Most of what I have to say is on International Defense Cooperation and the development and production of equipment. But before I move on to that, I ought to explain that Sir Clifford is laid up with three cracked ribs and an attack of pneumonia. Otherwise, he would have enjoyed some debate with Ambassador Komer, if he had stayed.

Notwithstanding that, I think there is already ample scope within what has been said for a very good discussion in the later part of this morning.

A lot of what I am going to say is linked to what Wlatter LaBerge has already said, but I think there are also one or two other points to be made, as well.

Now, in assessing where we stand on Defense Cooperation aimed at producing equipment for our armed forces, I think it is fair to say that all of the four countries represented on this panel have established a record of successful collaboration, but it has usually been on a bilateral basis, rather than anything else, and other countries could make similar claims. The motives over the years have varied. For example, in the earliest days of cooperation between the United States and the United Kingdom, that was during World War II, the objective was to exploit newly discovered science and technology in such a way as to take full advantage of all the available facilities for producing urgently

needed equipment and in this sense, dual production was not a new idea but recently, as we all know, it has been given additional emphasis and impetus. As I said, it was practiced 40 years ago in a number of fields which enlist radar, mines, aero engines, bomb sites, or, as we now call them, weapon aiming systems, fuses, radio countermeasures.

Subsequent to that, we in Europe solved the prospect of reducing our national contributions to research and development collaborated at an earlier stage of the procurement process for defense equipment which required the latest technology. By sharing the research and development, we could clearly achieve a saving on each side. By achieving a longer production run for the same equipment, we could expect to achieve lower unit costs. We have been doing this for many years and driven by the need to share rapidly increasing development costs and risks, we expect to continue to do so.

A number of successful ventures have been brought to conclusion. I think you have probably heard them listed before but it is worth repeating some of them. The Anglo-French Jaguar aircraft, a family of helicopters, the Lynx, the Puma and the Gazelle....all of those between the United Kingdom and France. The multi-role combat aircraft now known as Tornado, this time between the United Kingdom, the Federal Republic of Germany and Italy. In the missile field there is the Anglo-French Martel. When achieving this collaboration we tried different ways of arranging the industry and the government participation and I think it is worth emphasizing that all of the different ways have worked more or less successfully or perhaps more accurately, they have been made to work by dint of determination, perseverance and the expenditure of a great deal of time and energy.

As I see it, there was no single optimum solution which emerged from all of these collaborative ventures. It all depended on the circumstances prevailing at the time. But it is worth having that so far as the United Kingdom is concerned, about 15 percent of our defense equipment budget is now spent on procuring equipment from bilateral and trilateral international collaborative programs.

Now another form of cooperation which is being used successfully is by direct purchase of either parts or the whole of an equipment from overseas and we have purchased a considerable amount of equipment from the United States. Here again, this has enabled savings to be made on research and development costs. There are two quick examples I can give. The Phantom is one where we had to fit our own Rolls Royce Spey engine because we had to use it on aircraft carriers which were somewhat smaller than those operated by

The United States Navy. On the other hand the Hercules, heavy transport aircraft, is an example where we bought the whole thing and it has been very successful.

And now looking at missiles, of course, the Lance is a good example of a foreign purchase by the United Kingdom and all in all we spend about 10 percent of our defense equipment budget in buying things from overseas. So, in total about 25 percent of the United Kingdom defense equipment expenditure has an international flavor of one kind or another.

Now all of this really represents examples of ad hoc arrangements between government and between industry. In almost every example where the cost of development was shared, we in the United Kingdom foresaw a need which other countries also had. Very often equipment required was not exactly the same but it was sufficiently close for us to see our way jointly to collaboration, both in terms of sharing the cost and in terms of harmonizing the times when our respective armed forces would take delivery. But more recently, and we welcome this, the attitude of the Defense Cooperation on this, i.e., the United States side of the Atlantic, has led to a big revival of interest in defense equipment cooperation within the North Atlantic Alliance as a whole. As I say, we in Europe welcome this very much.

Now I want to refer only briefly at this stage to rationalization, standardization and interoperability. None of us would dispute that careful attention to this will undoubtedly enhance the efficiency of operations within the Alliance and could give to all of us savings in national R&D budgets and those budgets will continue to be under increasing pressure even if they are expanded.

I say this because I believe the United States will feel considerable pressure just in the same way as the European equipment budgets some years ago experienced pressure, and that the position will get more severe and this is because equipment, as it evolves, will become much more expensive because it is more complex. Now if this is so, it underlines the fact that equipment cooperation is an issue for us all and we have to find mutually acceptable solutions. There is no question about that. I use the term mutually acceptable because Europe has to continue to retain its own defense industry. To put it bluntly, it represents a means whereby we can earn money through foreign sales. By importing raw materials and using advance technology to convert them into specialized equipments of much higher value, we do much to sustain our own national economies and hence our contributions to the Alliance. For this reason alone, the British Defense Industry is one that we want to keep and to foster.

Now I want to turn to one specific initiative which has already been hinted at by Doctor LaBerge and it is an initiative by the Pentagon to increase Transatlantic Cooperation; namely, families of weapons, or equipment packages. As Doctor LaBerge has said a number of distinct families of weapons have been identified as possible vehicles for collaboration between the United States on the one hand, and the United Kingdom, France and Germany on the other. He has mentioned anti-tank guided weapons and air to air missiles.

Now progress, it is true to say, has not yet been rapid because at the moment we do not have exactly the same operational requirements and the time scales against which we have to replace our equipments are not fully matched together and this is an important point. However, as time goes by we should be able to exploit the concept of equipment packages more fully and more effectively. Basically what we are saying is that the idea is right, not only for our armed forces, but we also believe it is right for our industries and moreover the concept, the package that is, it has been tested and proved. The Anglo-French helicopter package, which I mentioned earlier, is a good example from the 1960's.

But there is one further aspect of the industrial and economic scene that does need to be mentioned. At the moment there is a balance of trade on military equipment of about three to one in favor of the United States vis-a-vis the United Kingdom. The reasons for this are, for the most part, fairly easy to see. The United Kingdom requirement for defense equipment is just about as wide, or almost as wide in terms of scope and variety, as those of the United States Armed Forces but obviously the quantities needed are much smaller.

While the United States has been able to sustain a defense equipment industry capable of meeting all of its requirements, budgeting pressures have forced us in the United Kingdom to be selective. There is no mistake about that. And to move from a position where for many years we met all our own needs from our own industry to a position where certain items of equipment have to be purchased from overseas and in particular from the United States. But as I have said before, I think even the United States Government and the United States defense industry will not be able to rely wholly on their own internal requirements and capabilities. As I have already said, equipment will become more complex and disproportionately more expensive to develop. There will be even greater emphasis on ensuring the largest possible market for whatever is developed.

All of this points to the need for closer links between American and European industry. But I see progress, as I

believe Doctor LaBerge does, as one of continuing in much the same way as it has done already; a steady process of evolution. It is true to say that it can be helped in some areas by appropriate changes to legislation and in some countries this tends to militate against successful sales of arms from overseas to meet the needs of other countries. But in this respect, formal intergovernmental agreements, necessary though they may be, can only go some way to removing obstacles. We need to build on the success of individual project decisions. We need to create the right conditions that make effective agreements between both governments and industries a reality.

Now it would be wrong and misleading of me to conclude this short speech without drawing the attention of everyone present to another aspect of International Defense Cooperation, which does need closer attention in the near future.

So far we have all tended to talk more in terms of collaboration on defense equipment and not quite so much of collaboration on defense systems. Systems often need elaborate software to make them work properly and in those areas where we have attempted to collaborate, such as Identification Friend or Foe, and other Command and Control activities, we have already seen something of the difficulties that can be encountered and have to be overcome. I am convinced that there is the will to overcome these difficulties but it is an area which I would suggest might attract further discussion later in this conference.

It is on this note, Mr. Chairman, that I would like to conclude, at least for the time being.

Barry Shillito

Thank you very much, Mr. Barnes.

Our next panelist is the Armament Director for the Federal Ministry of Defense for the Federal Republic of Germany. He is an individual that many of us have known, and known of, over an extensive period; an individual who is a renowned authority in the armament field; an engineer; an industrialist; and a senior military officer....a person who too has had many honors, recognitions, and decorations.

We are indeed honored to have as our next panelist, Doctor Hans Eberhard.

Doctor Hans Eberhard

Ladies and gentlemen, after having heard Ambassador Komer address the problems of defense cooperation in a rather passionate way, it may be disappointing to you but I shall nonetheless try to identify the reasons for our problems in a systematic way in order to then give careful indication as to where we stand.

Let me start with two questions which apparently are inconsistent with one another:

- Why has there been, for years, such an urgent demand for armaments cooperation?
- And why is it, then, that people still ask so many questions about the necessity and usefulness of armaments cooperation, as we are doing here today?

Don't these questions reflect the same uncertainty that we also encounter, time and again, with regard to other questions? Should one adopt the motto "unity is strength" or rather accept the idea that "the strong man is strongest when he is alone"? Therefore, if we want to strike the balance, we must face up to this conflict over and over again. Accordingly, the first question I shall have to answer will concern the necessity of armaments cooperation.

I shall go on to address the reasons and conditions which, in the present state of affairs, are decisive for any cooperation. I shall round off my brief considerations on armaments cooperation with an account of the objectives, and an analysis, of the practice of cooperation. Finally, I shall summarize the gist of my comments on each subject in a proposition. First, is the demand for armaments cooperation still justified? The recent discussions on Tactical Nuclear Force modernization should have made it clear to everybody that it is essential to ensure equivalence of the Alliance's military strength with that of the potential enemy, in order to maintain the credibility of deterrence as the basis objective of our defense effort.

These two tasks require forces of sufficient strength with a mix of equipment that is well balanced in terms of both quality and quantity. Up to now, the West has put up with the numerical superiority of conventional forces on the opposing side. The Western nations thought they could be certain of having advantages in the fields of strategic weapons and high-grade modern technology which could make up for their numerical inferiority in conventional forces.

The current assessment of the strategic force postures, however, shows a balance between East and West, which automatically calls for considerations on how we can meet the conventional superiority of the Warsaw Pact. Certainly not by seeking numerically equal force levels. In this respect, our limited economic and financial resources draw the line. But we are surely able to improve the effectiveness of our conventional weapon systems, using our industrial capabilities, the combined resources of our industries.

The quantitative superiority of the Warsaw Pact, and the fact that the conventional build-up of the Pact is approaching Western standards in quality as well, make intensified and systematic armaments cooperation a military and economic necessity. Not only continued, but intensified utilization of all Alliance resources is required in the face of the growing danger of further shifts in the balance of forces to the disadvantage of technological and financial capabilities of the individual nations. This leads me to Proposition 1 -- Armaments cooperation is a decisive component of NATO security policy; it is an element of Alliance survivability. The reasons for armaments cooperation--The success of armaments cooperation depends on the existence of overall objectives. These are in the political field, to maintain and improve the cohesion of the Alliance; in the military field, to strengthen the conventional combat power of the armed forces to ensure an adequate military equilibrium between NATO and the Warsaw Pact; and in the economic field, to use the available funds more cost-effectively.

We must seek to meet these objectives step by step in actual practice, ensuring at the same time that collaboration confers advantages on each of the partner countries. Armaments cooperation cannot be achieved against national interests. In equipment collaboration, the aims of the Alliance must as far as possible be brought into line with national concepts. Cooperation is meaningful only where this goal is likely to be achieved. This is a severe condition, of course. But it would be foolish and unrealistic to ignore it.

The Alliance's freedom of action is limited by national interests and by the interrelations between governments and parliaments. The resulting proposition is as follows: Proposition 2--NATO is a defense alliance of sovereign nations. Supranational interests and national interests must be made to coincide in such a manner that in armaments cooperation each country can expect to derive benefits also for its national purposes.

Risks in armaments cooperation--to expect benefits for each partner, however, means to ask each partner to be ready

to bear the burdens involved. The meaning of the well-known call of soldiers in combat, "You fire while I jump," must not be turned into its opposite, into something like: "You risk the danger, you bear the brunt, while I support you from under my cover."

Cooperation is viable only if all partners are ready, if required, to share the risks involved in decisions on armaments projects. In collaborative efforts, a division of labor among partners with varying degrees of readiness to bear risks would no longer be cooperation, but rather a symptom of dissolution.

Neither is it permissible for a country to arrogate to itself all projects of technological interest, letting its partners do the ancillary work only. As a rule, collaboration requires that the work shares be equal in value, or at any rate, adequately balanced. Unhindered transfer of know-how in keeping with the work sharing should be a matter of course.

These considerations result in proposition three: Armaments cooperation means the sharing of political risks and shared utilization of the technological know-how available in the Alliance. Ability to form partnerships: it is true that the great differences in the NATO countries' technological, economic and financial capabilities must not be overlooked. But the outstanding feature of a military alliance is precisely that the political importance of a member country ought to be seen almost independently of its other characteristic capabilities. Although it is understandable that in armaments cooperation, as a rule, only that country will be capable of partnership which has to offer the requisite technology and economic capabilities, it is nevertheless necessary to include in any assessment the political background of prospective participants.

This is becoming quite clear in the Independent European Program Group (IEPG) where efforts are being made to combine the different capabilities existing in Europe and at the same time to enable countries to participate in full, although their defense industrial capabilities are limited to a few special fields only.

Thus, the IEPG is not only a useful instrument for armaments cooperation, but almost a necessity if we are to go beyond bilateral or trilateral relations to achieve Alliance-wide, multilateral cooperation.

From this follows Proposition four. Although each partner's efficiency is indispensable for a functioning armaments cooperation, it is necessary in addition to seek full participation of those Allies which have less developed defense industries.

From this proposition follows further that neither industry nor national armaments directors are, by themselves, able to

carry the load of international armaments cooperation. Military and political determination is the fundamental prerequisite for any cooperative action.

This leads me to Proposition five. Meaningful cooperation is possible only if the military, together with engineers, economists and political leaders, jointly support cooperation and have a clear concept of its goals.

The demand for nations to make available to the Alliance forces which, compared with the potential enemy's forces, are well-balanced in terms of quantity and quality requires that we limit ourselves clearly to the essential tasks. All efforts which the Alliance is able to expend must be concentrated where they are expected to yield the highest effectiveness.

It is essential that we should not dissipate our resources but use our technological lead and our economic power selectively in such areas where the greatest effects for the Alliance can be expected. Based on the premise that it is NATO's objective to repulse any attack, we must both observe basic military rules and exploit the geographic conditions.

The most highly advanced technology should be used with first priority in the field of defensive weapons. This requires an analysis of the targets to be engaged to find out which of them must be primarily neutralized by the defender. We have to bear in mind that the terminal effect of a weapon is more important than its carrier. It is imperative for us to choose inexpensive solutions whenever they are likely to be sufficient with due regard to the relative advantages of the defender.

To make up for our numerical inferiority in conventional forces, we ought to use all capabilities provided by technology. This objective is reflected in Proposition 6--In armaments cooperation we ought to concentrate on key areas weighted according to priorities. Based on the military mission, priorities should be set where the use of advanced technology promises the highest defense effectiveness.

In the broad area, in which requirements of the individual nations must be harmonized, we need clear and realistic analyses of the various national objectives and the resulting cooperative efforts. From this consideration derives Proposition 7--Armaments cooperation will be efficient only if it is based on careful analysis of the objectives of the various Allies.

Orientation toward priorities and efficiency is possible only under long-term concepts based on careful analysis. We ought to have a clear perception of the military necessities, the technological feasibility, and the economic and financial capabilities, taking into account, last but not least, the political situation.

In addition, the time factor plays an ever more important role for armaments cooperation, since commitments by nations have to be made in the earliest stages of development for long periods of time and need political support.

Armaments cooperation is not static, but dynamic and ought to be flexible enough to adjust to a continuously changing environment. Therefore, it is of paramount importance to establish common principles for a planning system in the Alliance and to formulate collaborative programs.

By defining common concepts within the LTDP, NATO has met a significant precondition for planning and has shown the member countries a definite direction in which armaments cooperation should move.

Proposition 8, therefore, should be armaments cooperation calls for long-term flexible planning which must be coordinated within the Alliance and continuously adjusted to the changing environment.

Planning must also consider the extent to which the partners are ready to cooperate. Advantages and restrictions for the participating countries must be identifiable. The whole process is one of continuous optimization. Just as the complete fulfillment of a single requirement on a national basis, as a rule, does not necessarily yield optimum results, success in cooperative ventures, too, depends on trade-offs. A result which one country considers as the best possible answer to its own requirements must not necessarily be regarded as the desirable goal for another country or the Alliance as a whole.

This leads me to Proposition 9--In armaments cooperation, jointly developed solutions should be given preference even if the participating countries have to accept reductions in their national requirements.

The restrictions associated with trade-offs in cooperative efforts are indicative of the self-restraint which partners ought to exercise in cooperative activities. It is not possible in all cases to realize one's own ideas or to employ the preferred technology, i.e., one's own national technology. Concessions by, and balancing among, the

partners concerned are decisive for the success of cooperation.

Balancing, e.g., work-sharing, must not necessarily be achieved in full for one particular project. Alternatively, balancing can be accomplished by forming packages or combining systems into families, methods which we are currently trying to practice.

For the family of weapons concept, it is essential to achieve technological and economic sharing on the basis of an adequate balance in such a way as to ensure the use, in each case, of the best possible technology; a reduction of capital expenditure; a reduction of unit prices by the production of large series; availability of the results to all Allies; adoption of the developed systems by all partners having relevant requirements; avoidance of competing developments; availability of technological know-how to all Allies, as required; and the feasibility of co-production or licensed production.

This concept means that each country will refrain from national developments in certain areas and will rely on another Ally to comply with the agreements reached and not to circumvent them either technologically or economically. Mutually agreed rules and procedures must help to ensure the harmonization of national interests. Thus, Proposition 10 states that the success of armaments cooperation ultimately depends on whether we shall be able, in trustful collaboration, to agree on joint programs and procedures.

Ladies and gentlemen, I have tried to expound my views on armaments cooperation by putting forth ten propositions.

Let me repeat, in conclusion, that I adhere unreservedly to the concept of armaments cooperation, since, notwithstanding all difficulties, I consider it indispensable for the survivability of NATO.

Thank you for your attention.

Barry Shillito

Thank you very much, Doctor Eberhard.

Our final panelist is the Delegate General for Armaments, Ministry of Defense, France.

He is an engineer, and a senior military officer. He is recognized by many of us who have known him and known of him over many years as a telecommunications expert. He is also a widely acclaimed armaments expert and, like our other panelists, has many recognitions, many publications, and

many decorations.

I would now like to introduce General Jean Martre.

General Jean Martre

Mr. Chairman, ladies and gentlemen, I shall try to tell my comments in English but I am afraid to hurt your ears and I apologize for this.

I should like to begin by complimenting the ADPA and the organizers of this conference on the theme they have chosen for discussion by this assembly, which indicates the great interest taken by American military and industrial circles in cooperation with the countries of Europe on defense matters. I should also like to thank them for inviting me to take part in this debate, thereby giving me the opportunity to explain France's views on a subject of particular importance for the future of our countries.

As you already know, France values liberty, world peace and her own independence particularly highly. She, therefore, endeavors to play her part in safeguarding the balances of power between nations by avoiding all forms of military or industrial integration. While heedful of preserving her freedom of decision, she nonetheless takes on binding commitments in treaties and agreements which are likely to further the pursuit of her aims. That is why she belongs to the Atlantic Alliance which is an essential factor in maintaining stability in the world. As she is conscious of the threats hanging over the countries of Europe, France attaches the greatest importance to the means of ensuring her defense, which is why, despite an unfavorable economic environment, she increases her budgetary outlay for equipping her Armed Forces year by year.

However, an increase in financial resources is not in itself sufficient for our stated aims to be achieved. It is also necessary for this money to be spent in the most efficient manner possible. Yet technology is striding ahead, and equipment is becoming more and more sophisticated, and still we have to produce equipment in sufficient quantities for military effectiveness to be achieved. We, therefore, need to preserve a proper balance between innovation, that is the quality of the equipment and the quantity involved and we need to decrease the costs of developments and reduce unit production costs. These represent two fundamental objectives which cause France to strive after balanced cooperation with her Allies in the field of defense equipment. But there are many other motives behind this cooperation.

For brevity's sake, I shall quote only two, which, in my view, are of essential importance. The first is that the operational efficiency of forces liable to be in action in the same theatre requires adequate equipment interoperability at least where communications, fuel and ammunition are concerned. The second arises from the fact that the designing of weapon systems, the preparation of which takes place many years before their entry into service, constitutes a difficult and hazardous task. There is therefore good reason at that stage to have a confrontation of ideas in order to pick out the best solutions.

All these reasons explain France's contribution over many years to exchanges of information and to endeavors to rationalize armament programs, thus, entailing her participation in a large number of joint ventures. She is determined to intensify her activities in this field.

Experience does show, however, as everyone here knows, that the successful accomplishment of an armament program is a complex and difficult task even when undertaken on a purely national basis. So who could possibly imagine that it could be an easy matter when several independent countries are involved?

In fact, the way forward is beset by so many difficulties that the chances of failure are greater than the chances of success, and the participating countries must use all their willpower and even obstinacy in order to get results.

To start with, it is obvious that a collaborative program can only be initiated where similar requirements exist, from both the military characteristics' and time scales' point of view. It is true that the aim of information exchanges and discussions is precisely to enable differences between concepts to be narrowed and objectives to be harmonized. In order to be effective, concertation must take place at a very early stage, before decisions are taken and before it is too late for the programs to follow new guidelines. That is why we try to enter into discussions at the very earliest moment, when the weapon systems are going through their conceptual design stage. This is the work we are currently undertaking for a large number of programs designed to equip our armed forces in the nineteen-nineties. However, at this stage of system definition, concepts are far from being frozen, and ideas on the best technical solutions to adopt undergo frequent changes, thereby hampering decision-making. This often leaves us with the disappointing impression that work is not progressing, and that cooperation is making no headway at all.

While this maturing of concepts is going on, arrangements for industrial cooperation and distribution have to be drawn up. Industry has an important part to play here, since it is up to the companies to find effective solutions regarding work-sharing and the settling of legal problems. Among the difficulties encountered in this search for solutions, two take on particular importance: the first is that, in some countries, among them the United States, for one firm to be selected at the outset of a program, which makes it very difficult for the necessary industrial ties to be established. The second is that the contractors in the various countries are natural competitors and therefore reluctant to exchange the information they possess.

Finally, when a military, technical and industrial consensus has been achieved concerning the nature and the implementation of the program, it only remains for the necessary financial measures to be taken before work may actually begin. Difficulties then arise from the successive decision-making processes in the collaborating countries, which are often very different and sometimes very complex, with the possibility of national priorities leading to incompatibility of arbitrary budgetary decisions taken by the various partners. In this way, a program which had started off normally will grind to a sudden halt and find itself in serious difficulties.

I should now like to move on to two series of problems of a more political nature: technology transfers and sales to third countries.

Defense expenditure represents a very heavy financial sacrifice for each one of our countries; it is therefore natural for our governments to want to avoid any adverse effect on their economy and, on the contrary, to have beneficial consequences for their industry. This means that each country expects for its industry a fair return from its military expenditure. Moreover, the Research and Development activities must enhance our firms' innovative capabilities and enable them to acquire the essential technologies which guarantee their future. It is therefore necessary for the work-sharing which is an inherent part of any cooperation to be sufficiently balanced, both quantitatively and qualitatively, so as to be in no way detrimental to any of the cooperating industries. This assumes that it is possible for technology transfers to be organized between countries participating in the joint Research and Development activities. Yet, we have to recognize that this principle does not meet with unanimous approval and its implementation remains a problem.

As regards sales to third countries, it must be noted that each of our countries conducts its own foreign policy and consequently has its own conception of the best way to preserve peace in the world and the fundamental balance of power, all of which may sometimes lead to different appraisals of the advisability of some particular sale. On the other hand, the oil crisis has seriously jeopardized the Western countries' balance of trade; this means that these countries cannot remain indifferent to the extra income provided by arms exports. Finally, and this is particularly true in France, the volume of such exports represents a necessary balancing factor for our firms; a decision to abandon them would impose a severe burden on the costs of carrying out our own programs.

It is therefore natural for each country to wish to remain free to take initiatives in this field, on the clear understanding that requirements concerning secret military and technical information must be respected. However, we must not try to hide the fact that this constitutes an important problem which creates differences of opinion and places difficulties in the way of concluding certain collaborative agreements.

These are the main obstacles we encounter on the road towards cooperation and which we strive to remove one by one from each of the programs. Certainly, the results obtained are far from negligible and we have already made a great deal of headway in the direction of mutual understanding and common working methods, but we can still ask ourselves just how this this vast undertaking could be made more effective.

In fact, we simply need to observe that the main difficulties result from the manner in which each country deals with collaborative programs in accordance with its own rules and attempts to thrust its own particular constraints. This leads to a situation where these programs find themselves subject to a whole series of requirements, sometimes conflicting in nature, and to over-complex procedures. To be more efficient, we should ease the strain caused by these many national constraints and thus deal with collaborative programs on the basis of rules which differ from those governing purely national programs. What must be avoided, above all, is a situation where collaboration in a program is used by any one country to try to impose its own ideas and constraints upon the others. It must be well understood that collaboration is a free association for the pursuit of a common goal. This association must respect the different partners' fundamental interests, but it would be too much to insist that it comply with the special rules in force in individual countries.

To make cooperation possible, our military representatives and technical experts are led to make concessions in order to

narrow the gap between their points of view. What prevents our legal experts from making a similar effort?

This, of course, is easily said, but much less easily done, and I fully appreciate the difficulties involved in this type of approach. Nevertheless, I believe that such a way forward merits further exploration and deserves reflection.

In conclusion, I should like to emphasize a point which seems to me to be of particular importance. The successful accomplishment of an armament program demands a joint effort of government agencies as well as industry, and in each of our countries these two partners have learned to work together on an efficient basis. Your association, ADPA, shows the extent to which the need for such partnership is understood in the United States. In my view, it is absolutely necessary for this energy to be conserved at cooperation level. In other words, for contractors to be associated at the earliest possible moment with the genesis of programs and with the preparation of technical concepts, and for contacts to be established at this very early stage between companies in the collaborating countries for exploring joint work possibilities and the obstacles to overcome. During subsequent stages, it is likewise necessary for matters to progress on a parallel basis, between government agencies on the one hand and contractors on the other. This conference bears witness to the interest in cooperation displayed by all concerned, and I am confident that it will assist the progress of the consensus so badly needed if we wish to keep cooperation alive.

Barry Shillito

Thank you very much, General Matre.

We will now take a 15-minute coffee break.

First of all, we are truly pleased and honored that Secretary Bill Perry made the effort to fly all night and get here this morning and then, of course, on the last moment of arrival had to take on an unplanned meeting at the White House and then now comes over to be with us. He will stand in for Doctor LaBerge as a panelist in the Q&A portion of this entire subject. I have a strange feeling that they are thinking pretty much the same way on their positions.

Doctor Perry, as we all know, is our outstanding Under Secretary of Defense for Research and Engineering and, Bill, would you care to make any comments?

William J. Perry

I would like to just make a few opening comments, having missed the earlier session.

First of all, I would like to apologize to all of you and especially apologize to my European colleagues for having arrived late at this meeting. I assure you it does not represent any lack of interest or concern on my part for the subject that we are discussing here today.

Secondly, relative to Walter and I offering somewhat the same opinions on this subject, I have to say that we have been discussing and debating together NATO issues for the last three years and it is hard to say how many of the ideas I quote are his and how many of the ideas he quotes are mine. We have learned a lot from each other.

Finally, I wanted to make one specific comment in addition to what Walter said, dealing with the 1981 budget which was just submitted to the Congress and specific issues in it as they may affect our deliberations here in the next day or two.

You are all aware, I am sure, that we are requesting somewhat in excess of a 5 percent real growth in that budget for defense. I would like to put that somewhat in perspective as it affects these programs.

Relative to procurement, there is even larger than a 5 percent real growth and there will be a substantial impact with a great emphasis on quantities of equipment for modernization and readiness in the forces in NATO. So there will be a very substantial impact there.

Relative to R&D, the story is different though, and I want to underscore that since there has been a significant misunderstanding about the impact to increase an R&D budget. The R&D budget will be increased somewhat in excess of 5 percent. That entire increment of growth is all in one program. That program has two letters: the first letter is "M" and the second letter is "X." That is, the increment of growth in the MX program from FY-80 to FY-81 is somewhat larger than the growth in the entire R&D budget from 1980 to 1981. That is indicative of our commitment to maintaining the nuclear deterrents. But a consequence of that is that the entire rest of the R&D budget, including all of the NATO items, including all of the programs which we are discussing here have in aggregate essentially a flat budget in R&D from '80 to '81.

So the consequence of that is that we will have to continue to place a very great emphasis on selecting out those programs

for R&D which are most critical and we will need to continue a very heavy emphasis on cooperation -- in a sense, on sharing the R&D burden.

Specifically a propos that point, I think most pertinent to that issue is the progress in the family of weapons which has been discussed by several of the panelists here today. Our budget and our plans assume a continuing high emphasis and a continuing high priority on the so-called AMRAAM Program. This is the Advanced Medium Range Air to Air Missile. We are moving that program as fast as we know how to move it. That is, it is not fund limited, it is just programmatic, technically limited right now.

Secondly, we are beginning, and it will be undertaken at a very high pace, a next generation of man-portable anti-tank guided missile. That program will actually be started in FY-80, but will hit a fast pace in FY-81.

Those are the two parts of the family of weapons which we hope to negotiate with Europeans this year and those would be our part of those and we have those programs underway as if those negotiations were going to be consummated.

The other side of that coin is that we have no programs underway for the development of the SRAAM, that is the Short Range Air to Air Missile, or for the follow-on to tow, the vehicle portable anti-tank guided missile. So all of our budgeting and programming and planning at this time assumes success in the family of weapons negotiation. A failure of success there would either mean that these critical areas which we are planning on from the Europeans would not be developed or that we would have to divert from programs already planned in the R&D to proceed in those areas.

So, it is not academic whether we reach agreements. It is a crucial part of our programmatic planning at this stage.

Barry, thank you for giving me the opportunity to speak.

Barry Shillito

Thank you very much, Bill, and, again, we sincerely appreciate your being with us.

Now I think the first thing we should do is ask our panelists if any would care to comment on comments made by any of the other panel members. Mr. Barnes?

James F. Barnes

There is one thing which I would like to comment on which was a point made at the very beginning: that the impression was that individual NATO countries were planning their armament programs as though only they would have to take on the Warsaw Pact. This, of course, is not so. Our own Air Force, in assessing what it needs in the way of future aircraft, particularly for use in a ground support role, takes very careful account of the requirements of other countries, notably France and Germany, in working out how best to meet that requirement and to obtain the benefits from collaboration during research and development as well as during production.

Furthermore, and possibly even more important, it doesn't think in terms of an anti-tank role for that aircraft in support of the number one British Corps in Germany. It also thinks in terms of being able to support the other members of the Alliance, the Belgium, the German Corps, if the Warsaw Pact happened to break through with an armored thrust in those areas rather than the British one. This is an important point because it governs some of the characteristics of the aircraft, its radius of action, speed and so on. That is one point.

The other one is on tank collaboration. I think Ambassador Romer was generous in pointing out that the Rifle Corps had some superiority.

The other point that he might have said was that there had been attempts and efforts at collaboration on tanks for a very, very long time. There was even a shoot-out as to which of the different types of ammunition was better.

The other point that is equally valid and hasn't been emphasized is that any tanks that are to be used to counter an armored thrust by the Warsaw Pact have to be highly mobile, they have to be in place quickly and the conflict is expected to be so fierce that there won't, there just won't be time to go around stealing ammunition from the United States or anyone else. We need to have everything ready and that is the only way it can be. But that is by the way.

In other words, what I am really saying is we do think ahead and consider these matters very, very carefully before we arrive at a final decision.

The last point I would like to make stems immediately from Mr. Perry's very helpful explanation of how things lie on the big component of the fiscal 1981 budget. If you recall, I said that I thought that even in the United States there would be pressure on the research front and this would mean that there

would have to be very careful planning and collaboration, and everything that Bill has said underlines that.

I was most interested to note that the B increment was aimed at MX. It may not be known within the United States, although it is now public within the United Kingdom as a result of the statement, made by the Secretary for Defense in the British Parliament, that we are getting towards the end of a substantial program of improvement to some of our own nuclear submarine weapons systems capabilities. This is an area where we have spent, by our standards, quite considerable sums of money and there is still further planning and careful consideration being given towards setting aside sums of money towards the eventual replacement of the system so that we can continue our capabilities well beyond 1990.

So I think, just to sum up quickly, if I may, we do think very carefully ahead in planning out our armament R&D. We do enjoy the benefits of close consultation with our allies, not just the United States but France, Germany and many others, and it is in that context that I think we should continue our discussions for the remainder of this morning. Thank you.

Barry Shillito

Thank you very much, Mr. Barnes.

Now we will move into the questions and answers and I would like to ask our panelists to be as brief as we can, recognizing that we are going to be faced with a time problem in getting through as many of these as we can, also that we will try to get as many of the questions and answers into the proceedings as we can, those that we do not answer.

If there is anyone who does not want to make a speech, but has a question from the floor on any of that which has been discussed, we would be delighted to also take that. Now, are there questions from the floor that anyone would like to raise?

Okay, first question. Doctor Eberhard, with respect to the family of weapons, would you expect the United States to abandon any further technological development of certain categories of air to air missiles? Doctor Perry may want to get involved in this.

Doctor Hans L. Eberhard

That is a question for Doctor Perry, not for me. I am sure that the United States is prepared to do this because if the concept of weapons family will work or has to work, they have to do this. I see no other possibility and I am very hopeful in this case. Thank you very much.

William J. Perry

Barry, I would add one point to that. Getting very specific, the United States Defense Department plans to continue significant development funds in the development of focal plane arrays. Those will be useful for a variety of weapons we are looking at, but in particular it may be the chosen sensor for a seeker on the next generation of short range air to air missile.

The important thing about the family of weapons, though, is that if a European country is prime on developing the short range air to air missile, it will be their decision which seeker to use and which company would supply that seeker.

But from the United States Defense Department point of view, we plan to continue to sponsor vigorous development in the field of focal plane arrays and other technologies that would be useful in a short range air to air missile, as well as other systems.

Let me make one other point, Barry. When I was wringing my hands about the research and development program, I should have pointed out that notwithstanding the flatness of that budget in everything except MX, we have protected significant growth in one increment and that is the technology base of the budget, what we call 6.1 and 6.2 will still have a 7 percent real growth associated with it and that will protect continuing development in areas like focal plane arrays.

Barry Shillito

We have a number of very specific questions and I will try not to get into too many of those. I will undoubtedly hit a few. But General Martre and other panelists may have a reaction to this, too, particularly our European panel members, but how can U. S. industry obtain a voice or participation in IEPG other than through our government representatives? In other words, the question really ties to how a specific company or companies in the United States might become more aware of what the IEPG is planning, thinking of doing, that sort of thing that relates possibly to their business.

General Jean Matre

Yes. As you know, the IEPG is a forum between the European countries of Alliance for the programs of different European countries and to find cooperation capabilities which arise in these programs and to prepare and set up cooperative programs and, as you know, one aim of the IEPG is to have transatlantic

dialogue with the United States in one voice for setting up cooperative programs with the United States.

I think that it was perhaps necessary to have a simplification of the bilateral dialogue between each country of Europe and the United States and to a forum in Europe to have first phase of discussion between European countries and then to have a discussion with Americans. I think that in the industry point of view, I do not see how to have dialogue between IEPG and American industry. I think that under the industry point of view, it is more useful to have dialogue between companies themselves because there is not a unique voice of the American industry and it is not possible to have a unique voice of European industry. I think that from the industry point of view, it is necessary to have dialogue between companies which are separate and independent in the United States or in Europe and I do not see that IEPG is under administration and government label and not industrial label, and I think that IEPG is a means to detect a cooperative program and not to set up industrial means to achieve these programs.

Barry Shillito

I think the single point here is that IEPG is not designed as a vehicle to work with industry.

William J. Perry

Barry, there are, besides the point that General Matre made of the indirect way of influencing on a company to company, two other indirect ways of influencing that outcome. First of all by participation in the NIAG, which is a group of industries that, themselves, conduct transatlantic dialogue -- industry to industry. So that is an indirect way of participating and a third way of participating is through organizations like this and seminars such as this through ADPA, where you can influence the thinking of the U. S. Government representatives so that when they participate in the transatlantic dialogue, they can make your points of view. All three ways, all of them indirect.

Barry Shillito

Doctor Perry or Doctor LaBerge, President Carter's policy of controlling foreign sales of systems produced by our NATO allies, which contain U.S. subsystems, encourages independent development by those countries and seems contrary to the objectives of RSI. Do you see any change in this policy in the near future?

William J. Perry

No.

Barry Shillito

We have another voice here.

Response: Well, I was going to say yes...that it is not the President of the United States' unilateral policy. I believe that Congress and everybody else is working the problem more or less to the same end. It is just not one Administration's view.

Barry Shillito

Okay. We are glad that question came up and was so answered. Well, I am not sure that I agree with the answer, but I -- Mr. Barnes, when you indicated that about 25 percent of U.K. defense expenditures goes to foreign acquisitions, is that 25 percent of the total U.K. defense budget or is it 25 percent of the portion that is dedicated to acquisition, i.e., armaments hardware?

James F. Barnes

It is the defense equipment budget, hardware.

Barry Shillito

Defense equipment budget, hardware. Okay.

Doctor Eberhard, despite the commitment of the U. S. Government to use the German 120 millimeter gun on the XM-1 tank, why has the Federal Republic of Germany decided not to use the turbine engine in the German model of this tank?

Doctor Hans L. Eberhard

I could give the question back and ask if there is a turbine which is currently ready for procurement, if you understand my question. No, I will give the answer. We promised to use the turbine if a turbine is ready in the United States clearly for procurement. But not, it is not our understanding today the case, because the consumption of fuel is so high that for

logistical problems we can't use a turbine today in the Leopard II but we look for a turbine for the next generation of tanks still today.

Barry Shillito

Thank you, Doctor.

This question would apply to a broader, broader than the specifics, but it is asked of the panel in general.

Would any of the speakers care to comment on the progress in cooperation in the next generation of combat aircraft and is there a possibility that the family of weapons concept could be applied? Is there any planning, in other words, going on?

William J. Perry

I will start off with an answer to that. I am well known as being an optimist in this field and so you can calibrate my answer with that in mind. My answer is no. I would like to hear the comments and perhaps the other directors would like to say something.

Barry Shillito

Any other ---

Doctor Hans L. Eberhard

No, I can't add anything because it is really very difficult in this area to come together to a cooperation. You know we have started this some years ago with the United States. We have done this with France. We now start again to come together with out future tank with France. I hope we will get good results but we are not sure today and it is even really too difficult to do this in a two-way street over the ocean. I think weapons of the armies are so emotional that it is very difficult to come together in a common cooperation. I agree with Bill Perry. I have to agree. I am sorry.

Barry Shillito

A lot has been said -- this is to Doctor Perry -- about air to ground family of weapons. What does the U. S. plan here and how does the conventional cruise missile Tomahawk-type weapon fit into this effort?

William J. Perry

We don't have a coherent family of weapon program in the air to ground field. We are working piecemeal on a number of separate programs which hopefully will give us the benefit of some cooperation there but, quite honestly, we have not been able to define a family of weapons in that area.

There is a potential cooperation between the French and the United States in the Atlas. There is an ongoing cooperation between the British and the United States in the JP-233. There is a potential cooperation with several of the European nations, including Germany, on some versions of the Maverick and the GBU-15.

Relative to the Tomahawk question, we are considering that the Tomahawk or an adaption of the Tomahawk might become the medium range air to surface missile. That is, that the Tomahawk might be adapted with a large conventional warhead to operate at ranges on the order of 600 kilometers and, in effect, supply the stated need for medium range air-to-surface missile.

If that were to happen, we would undoubtedly offer that to Europeans as possibly meeting the needs that they have from long range stand-off missile, as well.

I think that summarizes my comments in that area.

Barry Shillito

Thank you, Bill.

This is a question that I recall from about 11 years ago - 12 years ago. The emphasis on four-power collaborative efforts or programs or various bilateral efforts or tripartite programs causes concern among the smaller countries as to the possibilities, as far as these countries are concerned, relative to production efforts, their manufacturing efforts. Can these countries in some way have a representation in these efforts at the government planning stage? This is to the panel, by the way. Doctor Eberhard?

Doctor Hans L. Eberhard

I think that is first a problem between the European nations and I have said earlier this morning that we have to look very carefully to the interests of these so-called smaller nations and I think we do so in Europe. It might be that General Moizo this afternoon will say something about it.

We think it is possible but not in the whole system like we do in the Four Power talks, more or less in components or sub-components and so on, where this country has special knowledge to help us to go into competition with other nations. It is not fair for them, in Europe let's say, 10 nations try to work together in one system, but it might be possible that two nations do it and the others work within the concept of its components and I think we will do so. I thank you.

Barry Shillito

Thank you. Any other -- General Matre?

General Jean Matre

May I add something also on this subject. I think it is certainly necessary to associate all countries of Western Europe in the defense equipment, but it is necessary to consider that 80 percent of the money which is consumed in R&D in Europe comes from the three nations, Great Britain, Germany and France, and that it is necessary at this stage of conception to have a consensus between the three nations, for I think a basis of launching a program and then to have a discussion with other countries to know if they desire to be a part of the program or not. But the problem is in the part of research and development money which is spent by three countries.

Barry Shillito

Thank you very much. Any other comments on this?

Doctor Perry, we have heard the phrase "European second source competition" in regard to several U. S. programs. Could you please elaborate on your understanding or intention concerning the use of this phrase?

William J. Perry

We have offered a working set of the systems that have been developed in the United States for what we call dual production in Europe, which simply means that we will make available the manufacturing know-how and the drawings to a European consortium to produce that same system.

A major example of an ongoing work program in S-6, in which the general principle of sharing is the heart of the program, is that we are providing the drawings to a European consortium to produce that same system.

the course of the next few years there will be a half a dozen or a dozen such programs started in Europe and we will have these two production lines going.

Whenever the quantity of needs for the United States warrants supporting two production lines for U. S. needs, we will consider competitive procurement of the several sources available and, therefore, to take the case in point, if there are two production lines going for the A-9L, one in the United States and one in Europe, and the United States has a production buy to make of an A-9L, we would consider bids from both of those production lines.

That is what we mean by competitive dual sourcing on that.

Barry Shillito

We have several questions that tie into this same subject--

William J. Perry

Excuse me, Barry. I should emphasize, though, that in the very nature of the transfer of technology, the European source, if it is transferred from U. S. to Europe, would be coming on line several years later and so the competition would be in the latter phases of procurement and not in the early phases.

Barry Shillito

There are several questions that tie into this same subject, interestingly, and several that ask the question, is there anything in the back of anyone's mind as far as U. S. DOD relative to some type of, well, isolating certain procurements into a NATO set-aside as far as NATO industry is concerned? Do you have any thoughts along that line?

William J. Perry

No.

Barry Shillito

This is directed to our European panel members, Mr. Barnes, Doctor Eberhard and General Martre. The U. S. is producing an outstanding utility helicopter for both Army and Navy, and is willing to co-produce. Now, why does the IEPC insist on spending 400 to 500 million dollars to develop and produce a piece of equipment that virtually will do the same mission? Do you want to start out, Mr. Barnes?

James F. Barnes

No.

General Jean Matre

It is a problem of helicopters, but also it is a general problem. The problem is knowing what is the size of the market on a specific product. In the mind of rationalization here, very often it is necessary to have one product and perhaps one or two sources for this product.

But in many cases, I see the United States able to have two competitive markets on the same type of product. It is natural if the market is sufficient to have two products in competition. I don't know if it is possible to say that if we consider the whole market, both for European countries and the United States, to have one product, or if it is possible to have two sources or three sources for one product.

The industries know that it is not always necessary to have a maximum size of the industry production, but only an optimum size, because excess size creates excess of fees and so on. I think in the helicopter field that there is a military tradition but there is also civilian tradition in the market of helicopters, both in civilian and military fields and I think that there is a place for an American industry and probably several companies and there is also a place for a European industry with several companies. I am not sure that it will be the most efficient to have exactly the same models in the United States and in Europe and I think that there is a place for two sources.

James F. Barnes

Just one word to add to that. Apart from the U.K., France and Germany, each having a helicopter industry, there is also Italy and, as I understand it, it isn't just one helicopter that together we see a need for, but a number. Among ourselves we have achieved some measure of agreement in sharing out which particular sizes, weights, capabilities should be assigned and which particular company should take the lead. It is a rather wider picture than just one in terms of a utility helicopter.

Barry Shillito

Are there any relationships or ties to interoperability as regards the European developed helicopters?

Doctor Hans L. Eberhard

I don't know the answer to that.

William J. Perry

Barry, can I make a comment on both of those questions? I would like to tie it in with the answer, the brief answer, I gave relative to family of weapons on combat aircraft, since they are similar issues.

I have worked very hard to establish families of weapons in areas where I thought we had some chance of success. Even though there are obstacles in some of these other programs, I still think if we work hard we will succeed and it will be to all of the countries' benefit to succeed.

I am not working in that area in either combat aircraft or in helicopters for the simple reason that I decided about a year or so ago that it would be wasted effort. The reason I believe that, and the reason I distinguish those fields from all of the other fields where we are working for cooperation -- the anti-tank missiles, the air to air missiles, the guns, the tanks -- is because uniquely in the aircraft and the helicopter field, we have industries in the United States and industries in Europe that work both on military vehicles and commercial vehicles and these same countries are competing with each other vigorously in the commercial market. The technology and even in some cases the very aircraft developed, end up having commercial as well as military adaptations.

It just seemed to me that the economic problems that were caused, that were posed, by close cooperation in the military field and aircraft were just too difficult to overcome. So I frankly have tossed in the towel on trying to get cooperation in those areas on a broad scale, on a family of weapons scale.

That should not preclude us, and does not preclude us, from trying to get cooperation in subsystems, or trying to get industry-to-industry teaming in those fields and trying to do things like, as an example, having the night vision device and the target designator being developed for our helicopters being made available perhaps for dual production for European helicopters. It does not preclude cooperation in that scale and we will strive to achieve it.

I do not think it is realistic to pursue family of weapon type cooperation in the aircraft and helicopter field and I am not pursuing it, simply because I do not like to waste my time pursuing objects which I think will not be achieved.

Barry Shillito

I would assume, therefore, that with the U. S. emphasis on rapid deployment and the discussions relative to inter- and

intra-theater transports, that family of weapons as related to such vehicles will not be a matter for consideration. Is that correct? That is one of the questions, by the way.

William J. Perry

Say that again, Barry. I didn't follow it.

Barry Shillito

We have a lot of discussions going on as far as rapid deployment and a lot of that will be intra-theater, inter-theater and the transports and so forth that might tie to the whole rapid deployment subject as it relates to NATO, broader than NATO undoubtedly. But do you see any family of weapon concepts applicable to such vehicles, particularly the aircraft?

William J. Perry

No, I don't. We are proceeding in the United States for the development of the single aircraft to meet that dual purpose. It is the aircraft which we have given the notation of the CX and we envision that as an inter-theater airplane which will have intra-theater capability inherently, just by virtue of the fact that we are going to impose requirements for short austere field capability.

We believe that that capability is necessary even for the inter-theater operation, because we can conceive of many scenarios, certainly in the various contingency scenarios we look at but also in NATO or even if you are flying a full cargo of military equipment from the United States, you might want to land in an austere airfield -- that the major airfields might not be open and might be crowded with other airplanes.

So we are looking at a single aircraft. It will be designed to meet the inter-theater requirements, but will have a substantial intra-theater capability inherent in it. We are not looking at two different airplanes.

Barry Shillito

I have a number of questions thrown at me as regards the competitive industry in the United States and the cooperative industry in Europe and here is one thrown to the panel along that line. Let's start with Doctor Eberhard. Are there efforts afoot to take positive action as far as marrying the competitive industrial environment in the United States with the cooperative industrial environment in our NATO countries in Europe. Are these positions reconcilable?

Doctor Hans L. Eberhard

I do not understand the problem because a lot of these firms which are represented here work together with European plants and factories and I think very close together. I see no problem in competition between these and the United States factories. I don't see the problem.

Barry Shillito

I think a number of U. S. companies have felt that they have had agreements or associations with NATO allied companies only to find downstream that the organization that they were associated with was the selected company by the NATO countries. The U. S. company still has to go through a competitive hurdle to become the selected U. S. company and these two acquisition systems are somewhat out of sync. Do you have a feel for this, Bill?

William J. Perry

I would say that both our family of weapons program and our dual production program recognize the difference in that and we, I think, have steered absolutely away from multi-nation procurement. That is, we decide which nation is going to do the procuring and then it is procured under the rules of that nation, which means that the industrial teaming has to happen on an industry-to-industry basis. The Government will not structure that in any way. The competition, then, will be conducted by the rules and procedures of whichever country has the procurement authority and whichever country is providing funding. That's not an entirely satisfactory answer to the question, Barry, but it is the only way I can see to --

Barry Shillito

I think part of this happens sometimes because some companies develop their working relationships before some of the decisions are made, as far as cooperation, and then they have to back off from some of these working relationships, which often are very awkward.

This is a subject that has received a lot of publicity recently relative to chemical warfare. The question is, "Please address the International Defense Cooperative efforts that have been accomplished or are planned in research, development, acquisition of weapons systems, training and munitions to counter the Soviet superior capability for chemical operations." Mr. Barnes, would you like to try that first?

James F. Barnes

Yes. This is an area where, over the period of about the last 8 years or perhaps even 10, various decisions have been taken not to proceed with developments in the field of chemical warfare within the Western powers and I have to say that although certain capabilities still remain and they are all in the context of using CW in the defense fashion, it's too early to say just how plans might work out towards any amplification or augmentation of what other capabilities we've got and it's frankly impossible to give, for me anyway, any more definitive answer than that.

William J. Perry

Barry, I think the question is a little bit off the track. The cooperation that exists in this field among the NATO nations is, in my opinion, first class. There is no difficulty at all in the cooperation among our individual R&D efforts in chemical warfare. The problem is that our efforts, whether they are viewed singly or whether they are viewed collectively, are totally inadequate to deal with the problem that we are confronted with. It has nothing to do with cooperation. It has to do with policy judgments about what our countries should be pursuing in this field. That is the problem. It's not a cooperation problem. It's a problem which I hope and believe we will come to grips with in the near future.

Barry Shillito

Thank you for clarifying that, Bill. I should have done that myself. There are a number of questions that tie to the same subject--what new incentives can be or should be in the works to encourage industry to get involved more in the RSI effort, earlier and hopefully, profitably. Is there anything additional that might be coming on that somewhere, somehow could stimulate industry more than might presently be the case or that might be more to your satisfaction? In other words, do you think that industry is really doing a hell of a good job on this subject right now?

Doctor Hans L. Eberhard

The answer is very difficult but I don't think we could do more than we do today. We have announced some areas of weapon families and we have an awful lot of bilateral and trilateral ventures together but as I said this morning, armaments cooperation must go on step-by-step and I would

add, in small steps. Therefore, I think there is no additional remark at this moment to make, not more than we have on the way we could start today. Thank you.

General Jean Matre

May I add some more? I think for the companies the major incentive is that the policy of the governments is to cooperate and since the companies wish to have contracts, I think they must have links to be ready to cooperate in the frame of the government policies.

William J. Perry

Barry, my further elaboration on that is that I think what will stimulate the companies for greater cooperation, greater teaming efforts, is simply more success stories and I believe that there have been a few in the last 6 to 9 months and I believe that there will be many more this year. But I suspect we are sort of past the stage where exhortations or even marvelous seminars like this are going to provide much stimulation. I think the companies will start spending more time and effort marketing in this field as they start to see more successes demonstrated in the cooperation.

Barry Shillito

Thank you, Bill. To the panel there have been many comments historically, in fact, this point was raised over the past several years as regards the multiplicity of ammunitions, the problems as regards one country's ammunition working in the hands of another allied country and so forth. The question arises why couldn't something be done as regards conventional ammunition that would make it a family of weapon kind of product with the special emphasis, including maybe even some of the smaller countries involved, in selected conventional ammunition in order to minimize the problems as regards our multiplicity ammunitions. Doctor Eberhard, do you want to try this, please?

Doctor Hans L. Eberhard

I have difficulties to answer this question because I should break it in two parts. First of all, I would confess we have failed in this respect. We have too many different ammunitions until today, but on the other hand, we have got some agreements in ammunition for artillery, small weapons. We are starting now agreements in air-to-air missiles, anti-tank guided weapons but these are weaponry of the next generation and so I think, as of yet, we have failed. But we are

now on the right way to overcome this problem. We will never do it in every case. I am sure that's too difficult because national interests are too big in this field and, as I said also this morning, if we look for cooperation we can only do it in such areas where international interests and national interests came closely together or we should not do it and be candid - can't do it. But I think, in ammunition for special artillery, we are on the right way also for the navies, but I'm not content.

Barry Shillito

As I say, this question has come up several times over many years. Mr. Barnes?

James F. Barnes

There's another area where one could see prospects for closer cooperation and effect standardization and that is apart from the question of actually manufacturing ammunition. It is a question of acceptance criteria, proof, so on and so forth. There's some scope there, too. I rather am speaking along the lines of Hans Eberhard. I think it's an area where we haven't gone as far as we should in the scope for further progress. I'm not at all pessimistic that we shan't make further progress. I think we will, but it will take time and, above all, just to emphasize what was said, there are some quite powerful national interests. It's an area where many countries have some manufacturing capability and they need to pay careful attention as to the future of that particular capability.

William J. Perry

Could I ask Walt a very general - the comment on that - Walt has his Army tie clip on today. That symbolizes, I think, some interest in this issue.

Walter B. LaBerge

I mentioned to Bill that I wore the Army tie clip as the most appropriate manifestation of interest in NATO affairs. To the Army, it's important that we have cooperation and, rather than wear my NATO tie, I wore the Army tie. I think the ammunition is a very good example that what's economically sensible will happen. That the national rates are relatively high for ammunition and the unit costs are low. So, there's no economic advantage particularly to joining together to get common ammunition sources. New ammunition, like the ICM munitions and Copperhead, and the like, are going to take major investments to come

about and, under those conditions, I would expect the economics to drive people to wish to cooperate.

Barry Shillito

Anyone else on munitions? General Matre, in addition to the political goals of your government, recognizing the potential military implications could you elaborate on the dollars and cents value of your R&D programs as far as selling the -- well, I don't quite see the tie of one to the other -- but the point relates to the discussion of selling the powerful computers and technology involved to the Soviet Union. The impact that you might see here as related to military issues problems as regards the technology transfer.

General Jean Matre

In the field of research and development, France is increasing very fast and it represents 25 percent of the equipment budget. In the research, we are increasing the expenditure at a rate of about 30 percent a year and we think it is necessary to pursue this effort in the next years for having capability of applying new technologies under future weapons systems. In the field of computers, they live up to the Soviet Union. I have no precise information because this field is not in my responsibility but I have impressions there was not French policy separate from, quite different from the policy of all the Western countries in the field. I have the contrary impression that changes between the United States and Soviet Union in this field was higher than what it was assumed for France.

William J. Perry

Barry, could I comment on that inasmuch as I do have the responsibility both for the development of this technology and for recommending the defense position on whether or not it should be embargoed, sold to the Eastern Block countries. That embargoing is done through an organization called COCOM, which basically is made up of NATO allies plus Japan. In the field of computers, for any embargo to be successful, it has to be supported by all of those countries. The level of technology we are trying to embargo to the Soviet Union is a level which is exceeded in all of the countries represented at this table here and certainly is exceeded in Japan as well, as well as other countries in Europe. So, it has to be a collective effort. We have set guidelines in computers which, in various ways, describe the capability of the computer and then we agree that no country

will sell computers that exceed those guidelines without bringing the issue to COCOM and getting unanimous agreement of the COCOM members. That is the institutional procedure which is set up. That's the procedure which the United States follows and it's also the procedure which France follows, so there's no indication of any individual nation being, you might say, a renegade in this field. The issues are discussed in COCOM. All computer sales come under the COCOM control. Now, as a matter of fact, in the history of the last few years there have been quite a few computer sales that exceeded the guidelines and those sales were concurred in by the COCOM countries, including the United States. If we were to look at the dollar sales volume of this, the United States was the largest single seller of computers to the Soviet Union that exceeded guidelines. General Matre's point is quite correct. So, that is an accurate statement of the history. Now, I will tell you, now that Doctor Garber and I have inherited this responsibility a few months ago, that we plan to try to change that. For those of you who are computer manufacturers, that will probably not be in a category of good news. We plan to do two things: first of all, to stand fast against exceptions to the guidelines and, secondly, to review the guidelines with a view toward tightening them in some respects. We're doing that because we believe that the computer and micro-electronics technology is the one area where the United States and the NATO allies and Japan have a commanding lead over the Soviet Union and the one place where if we don't give it away, we can maintain that commanding lead. So I intend to stand very firm on that point and I believe the United States, the Administration and the Congress will support me in that view and that we will develop a much stricter view in the United States in the future than we have in the past. It remains to be seen whether this new, much stricter view will be supported in COCOM. I will look to my compatriots here on this panel to do what they can to influence their governments in the position of supporting that position because we are talking about a net balance with the Soviet Union, when we look at military R&D. We have been discussing all of the things we can do by spending R&D, by investing wisely, to increase our capability, but we have to work twice as hard if we are passing it off to the Soviet Union at the same time. So, with our left hand we are increasing this activity and with our right hand we are giving it away. So I think we have been at fault in this area in the last few years and it is not fair to point a finger at France. The United States has been as much at fault as anyone and it is up to us to change our ways. Thank you.

Barry Shillito

I mentioned earlier that I had a number of questions directed to myself, but many inferring that there's greater concern on the part of our public than some of our people in the Executive

Branch as to the strategic threat - and this applies to our NATO allies, too, and their public - and then several questions tied to the point made on standardization versus interoperability in the beginning and I want to make it very clear that I said that without question the route that we have gone is the correct route theoretically, but as is the case with a lot of us, we've become rather frustrated with the progress that we've made. A question now to the panel on this point - in fact, several questions that tie to this. Despite the best efforts of some NATO countries and individuals in government, cooperation is minimal and painfully slow. Do you believe that we are doing as much as we can to deter and counter the massive Soviet threat, should this take place in the early 80's? If not, what might we do additionally, tied to survival? Would anyone care to talk to that point? Doctor Eberhard?

Doctor Hans L. Eberhard

There is no other alternative than to go the way we have started now to go. I know it's very, very slow and is very, very painful, but I see no other possibility to come together, to come closer together. But the second part of the question - what should be done if now the threat is greater than we think. This question is still under discussion, I think, in all NATO nations, especially is it possible that the nations work together in materials we don't have enough of for our production, let us say chrome, and we need it and it is not available, for example, in Europe. But if you want to speed up, for example, production of ammunition, we need chrome - we don't have it. Today we buy it all over the world to store it in Germany, but in wartime, I'm not sure we can do this further, or before wartime. This might be another area where we have to come together closer and help. I don't know if it's possible, but discussions have started now to counter a threat which might be immediate before us but the normal array of armaments cooperation - I see no other alternative to do it like we do it today.

Barry Shillito

This ties into another question, referring to Al Haig, General Haig. Interestingly, General Haig was going to try to be with us for this session today, but it happens to be the day of his first board meeting at his new company, so he sort of felt that he ought to be there.

As the panel has indicated, ground troops in Western Europe, including tanks, will have little lateral reinforcement capability. This was emphasized to me very interestingly in some of the discussions I had recently with a few of our logistics support operations in the United States, supplying items

to different countries in Europe who did not have the cross-fee capability to supply that same item to the other. In this respect, General Haig has said that the only way to deter this ground offensive would be by air, so shouldn't we, therefore, give greater collaboration on the future battlefield fighter than appears to be the case. So I think this would be directed more to you, Bill, in view of your comments as far as air vehicles are concerned.

William J. Perry

I can offer you my personal opinion on that, Barry, and it's not intimately tied to the issue of cooperation. That is, I think, yes. Achieving air superiority, achieving improved airborne anti-Army capability is of crucial importance and I think the way to achieve both of these desirable objectives is not by building or designing different kinds of airplanes but by designing much more effective armaments for the airplanes we already have and getting on with building the airplanes we have already designed in sufficient quantity.

Barry Shillito

General Matre, would you care to say anything about recognizing the French technical competence, the involvement of the French in so many ways back through a myriad of wars, the outstanding competencies that we all have come to know and love. What France's future will be as regards their forces as you would see it tied under the Supreme Allied Commander of NATO in a full arms cooperative manner. Would you have any comments on that?

General Jean Matre

I would say no.

Barry Shillito

I'll abbreviate the question. Do you envision the possibility of France becoming more involved in the near term as far as a full military member of NATO under the Supreme Allied Commander?

General Jean Matre

Yes, it is a political question and I am not in seat to answer, but I think in a personal point of view that there is

no capability in the human view future for an integration of France in the militarization of NATO.

Barry Shillito

Thank you very much, General. Mr. Barnes, what prospects exist for -- this is a NATO cooperative effort question -- for the RAF and the Luftwaffe to collaborate on the next combat fighter, say after the Tornado? What is happening here? Have the two nations begun any tangible collaborative effort as far as the next combat fighter? The RAF and the FRG?

James F. Barnes

The answer is yes. There has been a long period of discussion to identify the requirements, the aircraft is seen as having slightly a different role between the Luftwaffe and the Royal Air Force, but this is all moved towards involving not just the officials, but also the industries of the two countries with a view to working out the essential parameters of the design and, indeed, it's gone further and there has been discussion, too, with members of the French Air Force and French industry. So, the evidence so far is to say yes, work has been done with the prospect of a three-country collaboration, let alone two. There are still many questions to be answered as to how each industry might contribute and how each of the various requirements might be met. But, in fact, in some ways the question is, perhaps so far as German and British collaboration is concerned and some years, perhaps two years out of date, all I can say is we are continuing to work together.

Barry Shillito

We have many questions, somewhat critical U.S. administration questions, if you will, but as far as the time it takes on the U.S. side relative to MOU's, that is a question that keeps coming up versus our NATO allies. A number of questions tying to cost allowances, why, if we want to, involve ourselves more in cooperation, U.S. still has the cost for people overseas, office overseas disallowed - all of these kinds of questions. Would you care to make any comment at all, Bill, relative to the administrative side of things that might to -- so many of these things are very important, as far as effective cooperation.

William J. Perry

I'm afraid, Barry, I couldn't deal with that question in its generality. You have to deal with it on a point-by-point basis to be meaningful. Sorry.

Barry Shillito

Okay. I would like now to ask Doctor LaBerge to make a comment or so on third country transfers. Walter?

Walter B. LaBerge

I asked Barry for the opportunity to just readdress the question. We had a yes/no between us on the problem. I would believe that this Administration is working the problem perhaps harder than prior Administrations only because the issue is much more put in front of us now than it has been before. Let me just take an example: the reason we don't have tanks that are the same is that between the British and the Germans and the United States, nobody wanted to tell each other very much about how good their armor was or how you build it, how good their guns were or how good their projectiles were. And we essentially had agreed not to transfer that technology and we reaped the benefit or the difficulty of it, depending on how you look. We are now trying to look at these kinds of questions more in the open and we're finding them as other Administrations did - fairly difficult to solve. I don't believe we have a pat answer to the issue of either third country sales or technology transfer but I agree very much with General Matre who said those are the two key questions that have to be solved, and taking them out of the closet and talking to them is, I think, absolutely crucial. Barry, I would really solicit your help by your coming in and talking with me and the ADPA coming in and talking about the issue, because they are the things that today limit our ability to work together.

Barry Shillito

Thank you very much. I'm sure that we will take you up on that.

I apologize for the fact that we have not gotten through all these questions. We have, surprisingly, gone through an awful lot and we'll try to get the answers to some of these questions as best we can in the proceedings. We're running a little bit behind schedule, so with your approval I would like to now move on to our plans for lunch and, most importantly, I would like to ask that we give this outstanding panel a big hand for an outstanding job. Thank you very much.

Luncheon

Barry Shillito

As I mentioned, one thing you find as you chair this type operation is that you have to be rather flexible. V, like so many people that we've talked to here today, happens to be clogged up with one of these Washington colds that seem to hit so many of us about this time of year and has lost his voice entirely and so that's not a very good thing for a co-chairman. So he will not be with us this afternoon and hopes to get himself a little medication and be with us tomorrow morning. He's working on that.

Our luncheon speaker is an individual that I think has an awful lot to pass on to us. We are fortunate to have a gentleman who has had such an extensive background in a number of areas that relate to many things that tie directly to some of the international issues that we're faced with today. He is presently the Director of the Plans and Policy Organization of our Joint Chiefs of Staff. He is an individual who has had probably as detailed and extensive strategic experience in every way as possibly anyone in our military today. This goes from the operational, entirely tied to strategic up the pilot side on the operational side to combat Air Commander, Wing Commander, Command Pilot, entirely again, strategic, extensive strategic planning, deeply involved in the DCS Air Force Plans and Operations side of our Air Force, Deputy Director for Strategic Operations Forces, Director of Operations in the Office of Plans and Operations, and spent several years as Assistant to the President of the United States. He consequently has had an overview that very few people can bring to the critical environment that we are presently faced with. We are indeed honored to have as our luncheon speaker, the Director of Plans and Policy Organization of the JCS, General R. L. Lawson.

General R. L. Lawson

Thank you very much, Doctor, and distinguished guests and members of the Association. I must say at the outset before I get into my prepared remarks that when I had my original phone call from V. Garber about two months ago about appearing at this particular meeting, I had two thoughts rather immediately. One was this might be the time and the place to talk to a subject that is kind of uppermost in my mind right now about our relationships with NATO, and V. had indicated to me, the way he put it, he had a ticket for me to appear at this particular function and that reminded me of one of my very favorite stories about two of my very favorite figures from the Alliance. The story goes that George Bernard Shaw had a play that was opening in London and he was sparring at the time with Sir Winston Churchill

so he sat down at his desk and whipped off a note to Sir Winston saying, "Dear Winston - I have a play opening Tuesday next in downtown London. I'd like very much if you could be a participant with the opening night audience. I'm sending along two tickets. Bring along a friend, if you have one." Sir Winston got the note and took one quick look at it and went over to the desk and wrote in response, "George, I'm terribly sorry. I'll have to miss the opening night performance of your play. Affairs of state are just too pressing on that particular night. I do wish, however, you'd send me along two tickets to the second performance, if there is one."

In this particular situation, I'm going to try to do the very best that I can with my first performance and I won't count on that second invitation.

I said at the outset that to me it was a great opportunity, I thought, for me in my particular position, to have a chance to have a chance to speak. After the note that I got, I immediately sat down and started whipping out the general thrust of my comments that I'm about to deliver here and I'll say normally I'm a fellow who speaks kind of from a very rough set of notes, if I ever use them at all. However, after I got everything all put down on a piece of paper and got it started around the clearance process, it immediately became hung up in about five different offices, especially over in State, and one or two in Defense, and one over at the White House. I realized then that I had much more to say than I really thought that I was saying. However, one of the things that happens in this particular town is sometimes if you wait, it's a kind of nurturing process that as people chew up this great problem they had with whatever it was that you were trying to do, it begins to sound a little better, especially if the situation changes in some particular manner. And I think when I conclude my remarks, and I'm going to stick pretty close to this script for reasons that are probably apparent to all of you, when I do conclude with those remarks, you'll see that there's at least one other American that now thinks very much along the lines that I'm about to talk and after he spoke, everything became pretty easily cleared.

Let me say at the outset that it's always a pleasure to get a chance to speak in a kind of mixed company group, and when I say mixed company, I mean members of the Allies from both sides of the ocean with the general common goals that we've had. I think that this particular meeting and the great number of people that we have who are visiting with us from the Alliance indicates the general seriousness with which we are looking at the common danger and the fact that we are mutually prepared to meet it. I think it is customary at most NATO gatherings of this type that we mutually note the success of the Alliance in deterring war in Europe for over 30 years now. To be completely candid, it is not

always possible to determine or to state with assurance exactly what portion of that 30 years of peace is a function of the forestructure that we have established or the policies of strength that we have adopted. Nevertheless, having witnessed how the Soviet power is being used today and has been used in the past, especially where there is no significant force to oppose them, I take great satisfaction and I know that most of you do, as well, in noting that when hard decisions concerning strength had to be made, the Alliance has decided in favor of that strength. Only a month after the Brussels Conference, Soviet President Brezhnev threw down the challenge to NATO on the matter of theater nuclear weapons. The decision taken in December by the Alliance to deploy modern theater nuclear weapons cannot have been easy, especially for those who must live so close to those threatening Soviet forces. It is very gratifying for us to see that the Alliance chose to meet those Soviet threats with a policy of strength and agreed to deploy the new, longer range, Pershing II and cruise missiles.

In his threatening speech on October 6, Secretary Brezhnev said that, "the implementation of these rocket projects would radically alter the strategic situation on the European continent itself." I can only add that my sense of the situation is, "I certainly hope so."

But the point I would make today, even above that particular point, is really not concerned with those decisions that we have already taken. I mention the action on theater nuclear weapons because I see that action as tangible proof that NATO is ready to face up to its new challenges and that I must note for all of us that it is most fortunate that we have done so because challenges are indeed ahead.

The challenge I would like to talk about today is about the threat of the hostile forces now gaining control of the vital oil resources of the Persian Gulf, or at least bringing pressure upon those resources. The disintegration of the government in Iran and the virtual disappearance of the Iranian armed forces as a deterrent to aggression in that area, coupled with the naked Soviet employment of force in Afghanistan have implications for Western Europe and have already required the United States to take certain actions.

In order to keep a significant military presence close to the Persian Gulf, the President has ordered the nuclear carrier, NIMITZ to leave the Mediterranean and proceed to the Arabian Sea, where she is now on station. At the same time, our Government is organizing, training and equipping a rapid deployment forces consisting of various forces that the United States possesses, both land, sea, air and Marine, against the possibility that additional combat power may be needed in that region. These rapid

deployment forces will be for use wherever they are needed, but right now the focus is obviously on the Persian Gulf. I recently participated in a mission to the littoral of the Arabian Sea to explore the possibilities for access to facilities throughout that area. We had remarkable success with the leadership in that area and we will further that action. Further military action itself may become necessary in the area as the situation unfolds.

These military responses on the part of the United States raise an obvious question: do our actions dilute the U.S. commitment to NATO, or are they, in fact, actions for our common good in an area in which NATO will have to take an increasing interest itself?

I think that the interests of all oil consuming nations in the affairs of the Persian Gulf are obvious to everyone. Just as obvious are the internal instabilities in the region and the outside pressures that are being brought to bear on that region. I don't believe that we can expect the nations of that region to prevail against all of the pressures that are being brought to bear against them alone, any more than the nations of Western Europe could have prevailed if assistance by friends had not contained and continued the issues after World War II. The economic and military strength of Europe has been the result of the synergism of cooperative defense. It was the immediacy of the military threat to Europe itself that created the impetus for the "invention" of the NATO Alliance. It is, therefore, the immediacy of the military threat to the Persian Gulf region, both from within that region and from without, that now requires all of us to consider together the common danger presented to the Alliance and, of course, to the development of a common choice of sense of force response.

When NATO was founded, and during much of the past 30 years, the Soviets were incapable of projecting significant power to areas such as the Persian Gulf. In addition, our strategic superiority and NATO's advantage in theater nuclear forces was enough to inhibit Soviet adventurism. More recently, however, the situation has changed. The Alliance no longer enjoys nuclear superiority, either in strategic or theater nuclear capability. Steadily increasing Soviet nuclear and conventional capabilities provide them with a greater freedom of action and the Soviets have increased their power projection capability as they dramatically demonstrated in the massive air and sealoift of Ethiopia and certainly in the Christmas invasion of Afghanistan. They have employed surrogate forces in several recent significant military actions and now, for the first time since the end of World War II, they have used their own forces to expand the territory under their direct control.

Learning the lessons of history is not always easy. The world paid a terrible price four decades ago when it learned that aggression, if left unchallenged, feeds on itself. Small powers find it difficult, at best, to stand up to large powers. Nations that wish to live in peace may need help resisting the advances of their more belligerent neighbors. Even more importantly, a failure to help a nation in need is taken as a clear signal by aggressors that other "target countries" can be successfully toppled with little more than outside pressure. Perhaps most dangerous of all, all small countries begin to worry that they can expect no better - that they may be left alone in their time of need. So if the nations of NATO are indeed interested in the destiny of the nations of the Persian Gulf region, we must be willing in a highly visible way to take those actions which demonstrate to friend and adversary alike that we do, indeed care.

I think President Carter made it very clear just how important he considers the security of the Persian Gulf and the degree of the United States commitment to ensuring the security of the region. I am confident that the other nations of the Alliance are fundamentally in agreement with the United States on this matter. But we have to move beyond agreement in principle. We must look to the concrete steps each member can take to transform our own shared concern into an effective strategy for all of the Alliance to protect its common interest.

The threat to our free democratic societies that the Alliance was formed to preserve is no longer confined to Europe alone. Soviet aggression, both naked and through surrogate forces, threatens our interests worldwide. Soviet forces can challenge NATO's interests without coming across the Elbe. Indeed, the indirect approach may be even more effective. Their move towards the Persian Gulf may represent an indirect means of achieving objectives in Europe.

With that in mind, I believe that NATO must fully recognize that its interests go beyond the traditional geographical boundaries of the Alliance. If that recognition is clearly perceived, then we must now decide what it means in terms of objectives, and policies, and strategies, and in future programs.

Individually, most members of the Alliance have few military commitments outside of Europe itself. Most NATO forces are therefore structured to fight on the continent or in contiguous areas. The United States, on the other hand, has had significant interests in various parts of the world since the end of World War II. And as a result, many of our forces are structured to perform expeditionary tasks of one type or another which serve our global interests and commitments and have potential, as well, for rapid deployment to NATO. In view of the increasing global interdependence and the increasing inclination of the Soviet Union to use military force outside of Europe to pursue their objectives, these interests have, in large

measure become Alliance interests and merit NATO support. The U.S. cannot be expected to protect these wider NATO interests by itself. We believe this must be an Alliance cause.

Within NATO we have developed the concept of rationalization to pursue the greatest marginal return from the natural advantage possessed by each member. Although it has thus far been applied only to weapons and to forces, perhaps we can apply this concept to military missions, as well. To protect these wider interests, the members of the Alliance should take advantage of the capabilities they have already built into NATO and into NATO's forces. As the U. S. tailors and develops rapid deployment forces, other NATO forces should also be strengthened to ensure an adequate defense of Europe, to ensure the continued defense. Of course, the European members of the Alliance must also be improving their capabilities to help in protecting interests outside of Europe. In any case, the Alliance will have to devote greater attention, and forces, to its legitimate interests outside of Europe, especially in the Persian Gulf area.

In the context of the Persian Gulf, perhaps it isn't immediately clear what other NATO members could or should contribute. Some NATO countries have established traditional relationships with certain Gulf states. These may need to be expanded. Our efforts, in turn, should try to complement these traditional relationships in a way that makes sense. Further, it seems to me that other NATO countries can give valuable assistance without spending a mark or a kroner or a pound by simply providing the United States access to transit bases and overflight rights. Certainly there are other actions that European NATO nations can take, both in Europe and outside of Europe, that would also contribute to the Alliance ability to respond anywhere outside of the continent of Europe. The existing shortages of U.S. support units in the NATO area mean that any deployments to an area such as the Persian Gulf would further increase the strain on sustaining military support systems, as they now exist. Additional European actions could include such things as the appropriate storage of prepositioned equipment, the forward staging of combat supplies to improve NATO's response time and to increase the stocks of war reserve materials that will be needed within the central front, as well as outside. These may seem like very ordinary and very undramatic steps. But they are the kinds of things that must be done in order to take care of our combined capabilities - capabilities which we need to demonstrate on a continuing basis. These capabilities must also be employed in a fashion which will indicate our resolve to meet the new challenges and still maintain the fighting capability against the Warsaw Pact, which we have developed to date.

Our successful cooperation during the last 30 years demonstrates that we can achieve results when we want to. It is now

time to work to ensure that our weapons and our forces are available when we need them. If rationalization of missions is to be a logical complement to the rationalization of industry and technology, then we must immediately get to that task. If we are going to benefit from the synergistic effects of defense cooperation, we must expand our horizons. Not only is this the time to address NATO's expanding interests, it is also the time to begin thinking about what kinds of forces will be needed to protect those interests and what each nation can contribute in developing those forces.

In conclusion, then, let me answer my own question regarding U.S. forces in the Indian Ocean, in the Persian Gulf, and the U.S. commitment to NATO. When viewed in the context of NATO's expanding interests, the dispatch of a naval task force to the Arabian Sea and the development of rapid deployment forces by the United States represents not a dilution of our commitment to NATO, but rather, a recognition of NATO's vitally expanding interests. We can expect the challenge to NATO to grow, not diminish, and NATO must respond to these wider challenges with the same confidence in our mutual strength that has been shown within the treaty area.

I think that I might put just one small postscript at the bottom of those remarks. Mr. Shillito indicated that for a portion of my career I had the privilege of serving the President of the United States as the military assistant. Actually, I served two Presidents, President Nixon and President Ford. During the last visit of President Nixon to Moscow, during the last State dinner that was held during that time, there were about 500 guests at that particular affair. Of those 500 guests, I guess about 400 of them were Soviet and at least 300 to 350 of those were Generals, Marshalls and Admirals. When the General Secretary came into the room with Mrs. Brezhnev, he took her to one side of the room and then he came to the U.S. side of the room and got the President and me, I happened to be in uniform, and we escorted him over to be introduced personally to the Soviet guests. In that group of 300 plus military individuals, the General Secretary probably didn't miss three or four by name. He introduced every one without a name tag and told us what the individual did. A most remarkable feat. And afterward, the President indicated that it was one of the more remarkable feats he had ever seen in his life, to which the General Secretary replied, "Ah, no different than you, Mr. President." The President looked at him and he said, "I probably don't know five American military senior officers," (and I think he overstated by three) and to that, the General Secretary responded, "Ah, but last year at San Clemente, you introduced me to the members of your Congress, to both the House and the Senate, to their wives and to their children. Mr. President, that is my Congress."

That, I think, is the sort of information that all of us need to consider carefully as we plot the 80's. It is quite clear that the programs of that Congress are in being and working. It is now becoming increasingly clear that the objectives of that Congress are not necessarily in the best interests of our Alliance and it is also quite clear that that Congress is running on a timeframe that doesn't allow for all, perhaps, of the political debate that we would like to make to each subject. And so I would say to you as a fellow member of what I consider the finest thing that the Western world has done concerning its freedom of the future, if not for our own individual personal well being, all of us need to get about our actions as fast as we can because without those actions and a concerted effort together on a worldwide basis, our children and our grandchildren may not be afforded the opportunity to debate as we have.

Thank you very much. It's been a real pleasure to have this opportunity to chat with you today.

Barry Shillito

General Lawson, I think we can all truly say that that was an outstanding, stirring speech and most appropriate at this time. We can also understand why a few weeks ago you may have had trouble getting that speech cleared.

There's an interesting thing about our country. In the early 50's we spent an awful lot of money on a vehicle that probably would have trouble selling today in our Congress and that was the B-36. It was a vehicle that many people, strategically and otherwise, said did more to maintain the peace, even though never used in a wartime condition, than almost any other vehicle during that period. General Lawson started out as a B-36 pilot. I have a hunch that a lot of his strategic thinking ties to that particular incident.

Again, we thank you very much, General.

SESSION III

PARLIAMENTARY AND LEGISLATIVE
RESPONSIBILITY FOR DEFENSE COOPERATION

(Technical difficulties were again experienced in the taping of the beginning of Session III. We pick up after Doctor Walter LaBerge had begun his comments.)

Doctor Walter B. LaBerge

I have really two comments that I wanted to make. The first was that sometimes the perception of those of us who are charged with the doing of the job is that we get a great deal of criticism without very much constructive suggestion as to what would be preferable to what we are doing. I would like to recognize one member in the audience, Tom Callaghan, who sits over here on my right, as probably the unique guy who has a proposal as to what one should do different from what we are doing. Although Tom and I do not necessarily agree on the solution, at least I exempt him from the general criticism which is that nobody offers solutions, only complaints. I think that is one of the issues that I would hope the panel can talk to, which is really what are the difficulties and what can we do better, and a recitation solely of the difficulties is sort of a non-permitted solution. We, in the end, need to have constructive suggestions as to how we, together, can work more effectively. We have this, I believe, in the Congress of the United States with the Department of Defense now. We do have a reasonable relationship back and forth. In the broader NATO body, we do not have quite the same relationship of direct conversation between the people who represent the varieties of the parliaments and those of us who are doing the business, and particularly I appreciate each of the panelists' coming today because it does represent this opportunity for us to interchange information.

Let me introduce first the panel to you. I would only read to you the terse introduction which is written in your programs in order to save us the time of the rather longer introductions their backgrounds deserve.

Next to me, Mr. Carl Damm, Christian Democrat Party, Member of the Bundestag Committee on Defense, Federal Republic of Germany and Chairman of the North Atlantic Assembly Subcommittee on Defense Cooperation.

Mr. Patrick Wall, Conservative Party, House of Commons, British Parliament and Chairman of the North Atlantic Assembly Military Committee.

Next to him, Mr. Klaas de Vries, Labor Party, Chairman of the Second Chamber, Committee on Defense, Dutch Parliament and Rapporteur, North Atlantic Assembly Military Committee.

On the far right, Congressman G. William Whitehurst, Republican, 2nd U. S. Congressional District, Virginia, and Delegate to the North Atlantic Assembly. Senator Michel D'Aillieres is not able to be with us today.

With the agreement of the members of the panel, Bill Whitehurst asked to speak first because there are a series of votes now going on in the Congress that he could be a part of if he could finish and return. I would like, before I turn the floor over to him, though, to just make one comment on the immediacy of the problem that sits with us and to share with you one experience which has been quite profound to me, perhaps in a way that you all could get to understand more easily and some of the other things which are more obscure.

Let me show you one of the most marvelous pieces of technology you can buy anyplace in the world. This is a Speak-and-Spell made by Texas Instruments which allows you, through three transistors and a display board, to have a 600 word memory, to run spelling bees with it, to have it play games with you, and to have it both assess how well you have done, correct your spelling, correct your English pronunciation, and, in fact, all of this for three chips and \$40.00. This technology would have been hundreds of thousands of dollars two or three years ago. Because of the microcircuit advances and the ability to convert digital instructions into voice, one has, in fact, a complete revolution in the training industry. But this same technology will have a complete revolution in the command and control industry, and in the way the Soviet army fights because it can fight in a coordinated way, and unless we, ourselves, have a way of integrating our technology to take advantage of this, the Soviets will be able to have an ability to bring their forces together in a way far superior to ours. Now, within Texas Instruments it can set up a common language and it can make a series of these games and they all can play together. Within the Soviet army, they can set ways of working together, formats, digital bit stream rates and all of the rest, and they can play together. It is unclear whether in the North Atlantic Alliance we can, in fact, get our act together technically to take advantage of the new technology which is coming. I just ask you to play with this machine. It is smarter than most of us and it does this for \$40.00. We have an immediacy which I think none of us realize because we tend to believe the world is the way it used to be and we have gotten used to the slow process by which things take place. I would only contend that as people suggested to me this morning, ministries of defense have got to get their act together and move faster, so also there is the implication that the parliaments and legislatures have got to get their act together and be able to move faster. And that is the challenge that I would hope our guests talk to a little bit, also. With that introduction, say I then give you Bill Whitehurst.

Congressman G. William Whitehurst

Thank you, Walter. I really do apologize for having to leave. I'm between a rock and a hard place. The bill up this afternoon is called the Countercyclical Bill, which may not mean anything to you when I mention it, but it means a great deal to the cities of America, since it is a bill that will affect anti-recession, a move that can be taken in which the Federal Government can be of assistance to urban communities. I have a district which is largely composed of just two cities. So I have a rather parochial reason, as well as a genuine one, for getting back and I am sorry I'm not going to be able to stay for the rest of the dialogue with my colleagues here, all of whom I know very well and have the greatest respect for and have enjoyed their friendship as a member of the North Atlantic Assembly. I think all of you are in for a treat and I hope you have a lot of questions for them.

If you've ever been in the Armed Services Committee room, the Carl Vinson room, in the Rayburn Building, you may or may not have noticed a panel that is affixed to the dias just below where the Chairman sits. It is a quotation of part of the language in the Constitution, that section which describes where the power for raising armies and navies lies, and it lies with the Congress. It was put there, you may know the story, during the tenure of the late Mendel Rivers, who sometimes had differences of opinion with the Secretary of Defense at that time, Robert Strange McNamara. As a matter of fact, I didn't know Mr. McNamara, he's a very bright guy, but when I came on the Committee in 1969, I was intrigued by this and I learned the story. It reached a point in the relationship between two very powerful, single-minded men, that one had to remind the other that the power to raise armies and navies did not reside in the Defense Department, it resided in the Congress. And after a couple of exchanges, Rivers had this thing made up and put down below so that every Secretary of Defense, beginning with McNamara and stretching on into infinity, when he came to testify, the first thing he would see, if he looked straight ahead, was that reminder.

I tell you this story because not only is this an issue that the founding fathers left to us that will never fully be resolved, and Walter made reference to it in his remarks and I understand that, and it seems that every year when the budget is brought up we go through this, but many people outside of Washington don't understand it - people in the services, our military services, people in the civilian sector, and our European friends, of course, they are the most baffled of all by it. Now I dare say that the four gentlemen (excuse me, three gentlemen, in addition to Walter), three non-American gentlemen, how about that? I apologize, Walter. I didn't mean that like

it sounded. They all understand this by now because they have had a few sessions with us in which we have gone around and around on making policy. Everyone knows what the President's position is. He's the Commander in Chief. But we in the Congress have the power to raise armies and navies and all of the paraphernalia, manpower, what have you, that go with them. As a member of the Armed Services Committee, I, more than most of my colleagues in the House, have this specific charge. It is a great trust. I never dreamed when I became a member of that committee, and I came from the academic world, that I would have access to so much information. I was absolutely shocked when I came aboard, to find that weapons were as expensive as they were. I recall that in World War II the airplane that I flew in, which was made by Grauman Aircraft Corporation, a Navy torpedo plane cost \$75,000, and it was an airplane - had an engine in the front, wings on it, control cables went right through the radio compartment where I sat. And so 20-odd years later, I appeared on the Armed Services Committee and I began to ask some questions and I found the cheapest airplane in the Navy's inventory, combat airplane, was the Phalanx, and at that time it cost 4-1/2 million dollars. What a shattering thing this was to me. I have gotten used to it. I'm reminded of Everett Dirksen's story. He said, "Mention a billion here and a billion there and pretty soon you're talking about real money." I've had that experience.

Now there are several areas I want to talk about and I'm going to leave. I'm not going to duck out of here because I'm afraid of you. These things are fun - besides, none of you vote for me, so I don't care. One of the questions which frequently arises in conversations with members of Congress when discussing Alliance Defense Cooperation is the issue of long-term commitment programs. These fellows really give us an earful on it. The complaint has been raised that the American Congress in its annual review of defense budgets modifies programs to such an extent that long term commitments are at best uncertain. And so this frustrates allied cooperative programs. It doesn't just frustrate them - we frustrate ourselves with them. Look at all the stop and go programs we've had in recent years. I don't have to tell this audience this. You make your living with it. I was a great supporter of the Surface Effect ship. Totally altruistic in my support. Not one bolt of the damn thing was made down in the second district of Virginia. I believed in it. And the Treasury invested something like 400 million dollars in this vessel and it was killed. We tried our best last year. We socked 100 million dollars into it, in the R & D subcommittee, we got shot down in Appropriations and the reason I think we did was that we didn't get the kind of support we needed from the Defense Department because there were other priorities. What happens to the 400 million dollars that was already spent? Well, I was out in California and I went by to

see my friends a few weeks ago. And they took me in and they said, "We want to talk about the Logistic Surface Effect ship." I said, "The what?" "Well, this is the logistic ship, the one that's going to give us the fast carry-over to get over there with the supplies." And I said, "Well, this really does prove that you never can solve the chicken and the egg question because I always thought we'd build a war ship first and from this would flow vessels of this kind, but now we're going to go into this program and we'll probably back up and go with the war ship with this principle." They had the Secretary of the Navy up this morning before the Armed Services Committee, and the CNO. And I never had a chance to ask about this because I got so excited about what they said and what we're not doing overall, that I used my five minutes up wasting rhetoric on that. That's one reason I want to go back this afternoon, because they're still there and I want to ask that question.

I'm very sensitive to this issue, not only because of its affect on our membership in the NATO Alliance, but also from the impact on our own national defense efforts. Dick Icord, who I just hate to see like anything retire from Congress because of the superb job he has done as Chairman of the R & D subcommittee, this is one of his pet peeves. Bob Wilson, Bill Dickinson, any of us who have been on there, who have watched these programs and have been agitated by them. And our allies. You talk about wondering who's minding the store over here. They're bound to think that when we do this. And it's just very, very frustrating to see programs go through these life cycles if they ever complete them. And I could name a whole bunch, so could you. I'm not going to do it, I haven't got the time for it. It's not an easy problem to solve.

Another problem area for all of us is national procurement laws and regulations. Each of our nations, for historic, economic and political reasons, has developed unique laws and regulations. Modification of these is necessary to support Alliance Defense efforts. But this must be done without ignoring the basis on which they are developed, or eroding their power to protect essential national interests. It can be a very difficult problem.

I'm pleased to report that the Armed Services Committee's NATO subcommittee, of which I happen to be a member, has taken a major lead - took it last year in drafting and having approved by the House of Representatives a piece of legislation specifically intended to improve our military readiness through the waiver of unique American procurement laws for mutual support agreements. Unfortunately, the House did not complete its action until late last year. The Senate, it is hoped, will act on this legislation early this year. Perhaps then we can get it on the books. The experience of drafting and reporting this legislation

to the House reinforced many of our concerns over how Alliance Cooperation can best proceed through the tangle of unique national procurement laws and regulations.

Another difficult area which is discussed often is that of the Congress' participation in international negotiations. To begin with, in the American system of government it is the President and his officials in the Executive Branch who have the responsibility for conducting international negotiations. However, the Congress is responsible for approving policies and budgets to support negotiated agreements and this mandates that we know about them and concur with them. Now, I think that we've gotten this message through to the Defense Department. We have tried to make this clear over and over. We've had a really great working relationship with Bill Perry in this regard, I might add.

As to what can be done to merge all of this together so that we make meaningful progress toward the goals of RSI, readiness, standardization and interoperability, means somehow that we are going to have to make a dramatic departure from what we've been doing. And I want to close with this, my time is up.

We have used essentially, I think, so far a band-aid approach. And I think the only thing that's going to work, and I'm going to suggest this to my colleagues in the House, is perhaps to put this in the form of a treaty. Now I know this is dramatic and perhaps even revolutionary to suggest this and I want my colleagues this afternoon, after I've gone, to address themselves to it, too, to see if there isn't some way we can approach these mutual problems on the basis of treaty arrangements within the Alliance itself. Otherwise, I think we're going to do what we've been doing, and that is to put in the defense bill as we put this past year, where we agreed in the bill we're going to buy the German telephone system and there's no tie-in with AWAX directly, but we understand there's an understanding. I raised the question earlier this week with the Secretary of Defense and with General Jones, who was there, about the possibility of getting a short-range air defense system for the U. S. air fields in the U. K. One of the solutions is, and it's a good one, really, to use the British rapier system, and I don't know, Patrick, whether we've discussed this or not. But I think that that's a solution and it's a solution, perhaps, for the short term, one that is a step along the two-way street. But for the long, long pull of things, of having the kind of defense cooperation where we get together in the beginning of defense system and we take it all the way through, the R & D, all the way out to the end production. The only way I think that's going to happen, however, I truly believe, is if we negotiate it, nail it together in a treaty, everybody's locked in. Then you, as industry people, will not be wandering around the forest as you are now, not knowing what the policy of the Government is. We on the Hill, who want to protect specific parochial interests,

will know what we've got to do. It's the closest way I think we can come to solving the problem.

I'm going to leave you with that. That's a lot to chew on and I really apologize for having to go back, but I've got to get back for that vote. I've got two mayors in my home district who are concerned, to say the least, about the passage of that bill and if they find out I was down here talking to you and not there voting, there's just no way I can explain it properly, I tell you.

I thank you kindly for having me. Next time perhaps we won't be caught up in a legislative log jam like this and I can get away, and I know that you are not going to be disappointed with what you hear from these other gentlemen. They're just super fellows. Thank you very much.

Doctor Walter B. LaBerge

The next speaker on our agenda, Mr. Carl Damm.

Carl Damm

Doctor LaBerge, ladies and gentlemen. Coming back to what the General has said during lunch, mentioning Winston Churchill and George Bernard Shaw, for me this is, if you like, the second or, if you include the Aviation Week meeting in Brussels, it's my third performance and I'm very glad you haven't quit your attention to this afternoon session, or maybe at least to my speech.

But I haven't brand new things to say and, by the way, my English is better than last year or the year before. Maybe I should use this Speak-and-Spell system to correct my very poor English.

The time has come for renewal of NATO solidarity. Solidarity must and should be carefully considered and balanced. On the other hand, solidarity should also take a practical and concrete form, and I am saying that as a European after the Afghanistan event. Verbal solidarity is no more than lip service. Article V of the NATO Treaty, in which the Alliance partners agree that "an armed attack against one or more of them in Europe or North American shall be considered an attack against them all" can, as a friend of the North Atlantic Assembly once remarked cynically, be interpreted to mean both the dispatch of troops or simply the transmission of a telegram of condolence. Solidarity on the battlefield may be considered the highest form of Alliance solidarity. To show solidarity in the every-day life of our Alliance is politically much more important, however.

Cooperation in the field of arms is the most effective way of putting this everyday solidarity to the test.

First, it helps to avoid war by strengthening our ability to deter an aggressor. Second, it leads to greater interoperability and, hence, facilitates integrated action in a way. And third, it proves more effectively the words that "this Alliance shall continue in existence for the next 20 years, as well."

In fiscal year 1980, the Alliance is going to spend some \$70 to 80 billion dollars on its arms and armaments, procurement research and development together, excluding nuclear armament. During the next 10 years, the total amount will be \$800 billion dollars or \$1,000 billion dollars including inflation. If we succeeded in saving 10 percent of this amount within the next 10 years, we would save \$100 billion dollars. Since the international situation requires us to make additional effort, the point is not to economize, which means we could step up our arms expenditure by \$100 billion dollars over the next few years without increasing our appropriations in absolute terms, if only we cooperated in the field of arms.

Well, such cooperation is not possible without mutual confidence, without control and without everybody deriving an advantage from it. Mutual confidence is required for the achievement of medium-term aims. Compensation in any given project costs time and money. Short-term compensation sows the seeds of discontent in the field of arms cooperation.

Let me say a few words at this point about the present state of AWACS compensation. The United States has placed orders valued at \$27.5 million marks under the AWACS program itself, as well as orders for administrative vehicles to the tune of \$19.1 million marks and it has paid license fees, etc., for the 120 millimeter gun in the amount of \$33.6 million marks. All in all, the United States, and I'm happy to say that, has thus made the compensation due for 1979. This shows two things. First, the United States is willing to fulfill its obligations towards the Federal Government of Germany even though this is apparently not considered an easy task at the various decision-making levels in the United States. Second, the American AWACS compensation for the German contribution of more than \$1 billion marks is of interest to the German industry to the extent that it relates to co-production and sub-contracting. But it is expensive for the states involved. A 10 percent price increase for AWACS means \$180 million dollars, the total cost of aircraft E3A is \$1,826 million dollars. It would have been cheaper if NATO's first aircraft had been produced in America and America's first 500 Leopard II tank had been produced in the Federal Republic of Germany. Coming back to Bob Komer this morning, this would have been much better than if the British would have gone to the smooth bore gun.

The second part of U.S. compensation, namely, civilian vehicles and telephones for the American Forces stationed in the Federal Republic, does compensate us for the cost of \$500 million marks incurred under the AWACS program, but it is not a two-way street in the armaments industry.

Let us at long last conclude a skeleton agreement on arms cooperation and arms compensation. So far, I can rely on what Bill Whitehurst has just said about any kind of a treaty between the NATO nations. Under such an agreement, the Alliance partners undertake to carry out the military development and procurement projects with the maximum cooperation. To that end, they made use of the CNAD. I think everybody knows what CNAD is -- the Conference of the National Armaments Directors. As of now, this body will record all economic services rendered by one partner to another insofar as they relate to development and procurement projects. The partners undertake to make compensation within five years and not within any project. Within five years at the latest by placing corresponding military orders. Should the partner states unanimously come to the conclusion that such military orders cannot be placed, compensation will be effected through government orders for civilian goods.

The United States undertakes to compensate its European partner within the first five years for at least 50 percent of the military equipment sold to them by military purchases of its own, while the European partners have to compensate each other 100 percent.

The partners in the Alliance will ensure parliamentary support for this agreement by ratifying it and keeping their parliaments continuously informed about the activities of the armaments industry and the government. The budgetary rights of the national parliament must not and cannot be curtailed. Should a decision taken by national parliament against the will of the government affect a bilateral or multi-lateral cooperation or procurement project being executed in one of the partner states, those parliaments will, under the agreement, be obliged to enter into consultations before finalizing their decision. These consultations will be held in the Military Committee of the North Atlantic Assembly, of which Patrick Wall from the U.K. is the present Chairman, or in a Subcommittee on Defense Cooperation of which I am the Chairman today. And may I say this, most members of this Subcommittee on Defense Cooperation are present today here in this ADPA conference.

We are dealing, as many of you know, with the subject of cooperation for years. We have no decision rights in the North Atlantic Assembly. But what we can do, is we can, for example, talk continuously to other Congresses. Yesterday we did that to the Armed Services Committee of the House; this afternoon, we will see some Senators, members of the Armed Services Committee of the Senate. This makes us not only more understanding of

each other on both sides of the Atlantic, it gives us the opportunity to go straight to the point if there are separate views on the same issue and that helps Administrations very much to settle different and very complex issues.

Well, this is my proposal. And going on, I think arms cooperation among Alliance partners should, to the greatest possible extent, focus on those fields which most effectively strengthen the medium and long-term ability of the Alliance to defend itself. So far, I am relying on what General Eberhard has said this morning. The long-term defense program provides a suitable framework for selecting such spheres of cooperation. The Alliance partners take a decision on each bilateral or multilateral cooperation project annually, report annually to the May meeting of the DPC. The Secretary General will, in turn, that is the Secretary General of NATO, will inform the Military Committee of the North Atlantic Assembly at its preparatory meeting in the middle of the year of the projects initiated by the Alliance partners.

The Military Committee of the North Atlantic Assembly informs the Competent National Parliamentary Committee so as to enable the plenary session of the North Atlantic Assembly to prepare a statement on the basis of the comments submitted to it by the Military Committee, which statement will then, via the Secretary General, be transmitted to the DPC for its December meeting.

What we in Europe need is a more visible sign of America's readiness for transatlantic cooperation and a two-way street.

I personally continue to believe that the real success of arms cooperation in the North Atlantic Alliance will only make itself felt once the United States takes transatlantic cooperation seriously. I am more convinced than ever today that even the United States is no longer in a position to do everything on its own and everything at the same time. If I were an American, I, too, would no doubt succumb to the temptation from time to time to shut myself off from the rest of the world and to try my luck with autocracy. I am aware, of course, that nobody present here wants this to happen. I wonder, however, whether one or another of the participants of this conference does not think to himself, "Yes, but if we wanted it, we could do it." The United States must live with the communist on its doorstep and it has to import 50 percent of its energy requirements. The Europeans must live with an iron curtain running right through the middle of Europe and consequently with a divided Berlin and with the greatest military threat in our history, and with 100 percent reliance on imported oil. We really depend on each other. And if the United States should lose Europe, it will not remain number one in a stronghold of freedom in the world for much longer.

This is why, in this instance, too, American leadership is of vital importance. For some weeks now, the Europeans have begun to feel once more that the United States is fulfilling its leadership function. There may be some Europeans who have to get accustomed to this fact once more. I encourage our friends to take over a leading role in the field of arms co-operation. To lead means to set a good example in this respect. Last year, the break-down of the project was narrowly avoided. The Department of Defense and the U. S. Army deserve to be congratulated for having held on to The U. S. Congress deserves to be congratulated for having resisted the temptation to scrap a system for which it had already spent no less than \$300 million.

Last years' developments were not all of them gratifying, however. I will give you two examples, German examples, if I may. This is due only to the fact that I am a German and I know best what is going on in Germany and in relation to the United States. To mention merely two projects, there has been no progress, unfortunately, on the issue of the tank track. I hope both companies involved will again speak to each other and the governments may then support real success in this field.

Coming to another example, after a 3-year test, the German MAN 10-ton truck is still one of several competitors. Any criticism voiced in this respect is not directed at competition, as such, but at the loss of time and money and the failure to achieve the requisite level of interoperability in Europe.

I repeat, and I'm coming to the end, the Pentagon must assert itself more effectively vis-a-vis the armed forces if it does not wish to be a source of irritation to its European partners. What should the United States do? The launching of a transatlantic weapons family would be an unmistakable sign. Doctor Perry has the right concept. It only needs to be translated into practice and I am very hopeful. Although Doctor Perry is very skeptical about this, an American participation in what the Europeans call the TKF-90, the Tactical Combat Aircraft Fighter of the future, would silence all the doubters. If the U. S. Air Force, the Pentagon and the Congress could make a decision to develop and produce the TKF-90 to the year 2,000 and into the next century, that is the successor to the F-15 and 16 and so on, jointly with the Europeans, then both friend and foe should realize that we are really determined to cooperate in the field of arms and that we are determined jointly to defend our freedom in the next century, as well.

We all are in a position jointly to meet every and any challenge provided we are determined to do so. We have more than 500 million people, the most advanced technology, the strongest economy and the most liberal order ever devised by human beings.

Provided we stop wasting our funds, we will not only preserve our freedom, but also promote freedom and social justice in the Third World. Thank you.

Doctor Walter B. LaBerge

Thank you very much, Mr. Damm. The presentations so far surely have fulfilled the suggestion that concrete proposals be made and I am sure in the question period, we will all have a chance to explore a little bit more of what might be done.

Well, this is a great start. We're at the half-way point and let me now introduce to you Mr. Patrick Wall.

Patrick Wall

Mr. Chairman, ladies and gentlemen. There is no need for me to argue in an assembly like this the necessity for cooperation in defense and, indeed, in other fields. Interoperability is essential because of the short, or relatively short time requirement. I believe standardization is equally essential, but that, of course, is a much longer-term requirement.

Now who are the bodies that are going to achieve this form of cooperation in defense? I suggest basically there are three. The politicians, the military and industry.

Taking each one in turn, there is a snag with the politician. Sometimes his constituency commitments compare unfavorably with what may well be the national or international requirements. And that's a point politicians have to watch.

Again, on the military field, the military want the ultimate. the ideal weapon. So designers produce an aircraft and then they hang everything onto it until it looks like a christmas tree and can't take off in the distance it's supposed to take off.

Finally, there's industry, which holds a very important sway over defense expenditure. I'm sorry to say this does not apply in my own country. In Parliament, we debate defense about five days a year. We are presented with a fait accompli with the Government and in the 26 years I've been in Parliament, I can't remember a single case of Parliament altering any of the defense expenditure, irrespective of who was in power. We are always conducting a post mortem.

On the other hand, we are now taking a leaf out of your book, at least I hope we are, and that is in January of this year, we set up select committees on defense and a select committee to cover each ministry. In the past, we've had something like this,

but they were called Estimates Committee and they looked at what happened two years ago, a post mortem which interested nobody except the experts or the professionals. Now we have the power to look ahead. So I hope that gradually this will improve, Parliamentary power over defense expenditure.

I want to refer briefly to some European examples of cooperation, to NATO, the Jaguar, the Millan, the Concorde, the French helicopters, and so on. So European industry - and parliaments, because they have to approve - have learned to cooperate and do cooperate.

What about transatlantic cooperation? Well, here, of course the fear, and we have to face it very frankly, is the enormous industrial power of the United States. European companies are worried. They're frightened they may become sub-contractors of United States companies. And that, I think would be bad for Europe, bad for the Alliance, and also, I suggest, bad for the United States, for after all you don't have a complete monopoly of all ideas. Take, for example, jet engines, the V-1, the V-2 and so on.

Now, Mr. Chairman, I want to turn to the time schedule. How long have we got? What really is the distance in which we have to think? Well, you know, some of us were over here in the Fall, giving evidence to the Senate and the Foreign Relations Committee on SALT II. When we came back this week, we found a very different atmosphere in the United States. Last time you were talking about detente. This time we were told the United States had made up its mind that it's going to face the threat -- what the devil are you going to do to back us?

Well, I just give you one or two examples. We in the North Atlantic Assembly, which Carl Damm has talked about, eight years ago made proposals that we should cooperate outside the NATO area and, ladies and gentlemen, the threat today, as you know only too well, is outside the NATO area. We were laughed at first, but gradually the governments involved agreed to some degree, at least, of advanced planning in these areas. The only other thing I would say to you is that my Prime Minister, Mrs. Thatcher, was called the Iron Maiden before anybody suggested there was an Iron President.

Seriously, though, let's return for a moment to these two areas. The Middle East. First of all, in Africa we did nothing. Afghanistan and the threat to Iran and the threat to the Gulf is now fully appreciated and the West has woken up, thank God at last. But there is a danger I suggest, ladies and gentlemen. Our eyes are turned on the Middle East. We're all thinking about the Middle East. But there is another key area outside the NATO area and that is Southern Africa. And while eyes are fixed on the Middle East, we may perhaps forget what has happened in that part of the world. Angola, Mozambique, Rhodesia, which

may go up in smoke at any moment, Libya, South Africa. It reminds me of the 30's. The Rhineland, Czechoslovakia and Poland.

Now why is this important to this audience? Many people here, Mr. Chairman, build aircraft or tanks or ships. Well, now I'm going to give you some figures and I do it because I want to get them on the record. If you take the Soviet Union and Southern Africa together, the figures I will give you are the world production and the known world reserves.

Of platinum in those two areas together, 84 percent and 99 percent. Of chrome, 67 percent and 84 percent. Manganese, 62 percent and 93 percent. Gold, 72 percent and 68 percent. Vanadium, 70 percent and 97 percent. Asbestos, 27 and 35. World production first, world known reserves after. And the same story may well hold for uranium, titanium and other metals which you know all about but are merely names to me. But, unlike the Middle East, I suggest we have not woken up to the dangers, to the threat to mineral reserves and mineral resources, particularly to Europe, in that part of the world.

Now, there is always the danger of thinking that the potential enemy is 10 feet high. And I just mention this because I think it's important. The economy of the Soviet Union has been declining for the last 15 to 20 years. The manpower of the Soviet Union has also been declining. They have their fuel problems as well as us. They have their religious problems, too, because the eight Moslem states would outnumber the Russians toward the turn of this century and they have possibly a new leadership coming in the Kremlin.

I refer to this other question of timescales. It seems to me that we are gearing up and the Soviet Union's internal pressures are gearing up for much the same period. And I would give you 1984, the next Presidential election year. And I think we ought to keep our eyes on that year and have our preparations ready by then.

Now Soviet standardization -- I suggest, ladies and gentlemen, again I am probably teaching my grandmother to suck eggs because I think a lot of people here know much more about it than I do, but I do suggest that the backfire on the SS-20 are merely the first fruits of many years of R&D in the Soviet Union. If a country spends from 13 to 15 percent of its GNP on defense for a period of 15 to 20 years and the other countries spend from 5 to 7 percent over that period, it's quite certain who is going to come out the best in the long term. And I believe there may be many shocks coming, quite apart from the fact, as it was said this morning, they only need one design for each particular weapons system and they spend far more on hardware because they spend far less on men.

Now, let me get back to the real subject -- standardization and interoperability. How can we standardize? I suggest there are five current methods.

Firstly, purchase off the shelf, as has been done in the case of the This, I hope, will lead to a collaborative project in the AV-8B. And here we have a snag again, as mentioned this morning -- the question of third party sales, but no doubt that could be ironed out.

Second, purchase of a design. The American purchase of the Rodent turned out to be very expensive. It may well have been better to have bought off the shelf.

Third, competition. Carl has already referred to this. The tank competition. Now, I know the Americans love competition and that probably is the right answer for private enterprise. But if you wait until nations have built a special weapons system and then you compete, somebody is going to suffer a great blow to their pride. And this can be dangerous. And I bet that the country that lost either the gun or the tank probably thought that it was pretty unfair competition, anyhow. We were told because the American tank was selected, that we are now going to have common tracks and common systems and common this and common that. I hope to heavens it's true, but I'd like to see a little more evidence about this. That is the snag with competition. If you wait until you've produced the prototype and then compete, national pride becomes involved.

Then again, the fourth method is dual production. The F-16. That is excellent, going well, but, of course, when you have dual production one country must lead. Normally, this would be the United States because of their size and the scope of their industry. But I suggest not always. And I want to outline to you one possible scenario. Carl Damm has talked about TKF-90, the new fighter. We've just been around to see some of your major air industries in this country. We find that my own country wants a long-range interceptor, the Federal German Republic wants a short-range fighter. And we find that and Northrup are discussing possibilities, MBB and McDonald-Douglas are discussing other possibilities, and our three countries, Britain, France and Germany, are talking about the same problem on their own continent. At the moment, there is no U. S. requirement for a fighter. Now, let's assume that in two years' time we resolve all these problems and all the American, German firms, all the European firms, all the transatlantic firms get together and say, "We're going to build that fighter." What may then happen is, the American Government will say, "Ah, yes, but we have a requirement. And we're going to think of our own requirement, and I'm going to order 5,000 and you're going to only have 500, I suggest that you ought to buy ours."

And this is the problem always, when faced with enormous power of American industry. Therefore, I believe, we must start planning early. And it's no good us planning separately. We must get together at an early stage.

Finally, Mr. Chairman, there's the fifth suggestion and that is, I think, the most important of all. The NATO force. AWACS, to my mind, is important because it is not a national force, it's an international force, it's a NATO force. It had difficulties, it was American designed and sold to Europe, it had delays and because of the delays my own country did not cooperate, wanted to but it couldn't wait those extra two years, and so we're out of it, but it is the best answer because it is an international force and, of course, it's coupled up with dual production.

So I conclude by saying, what is the need? Well, we've heard a lot about individual project decisions. I don't believe they're good enough. I believe we must cooperate at the earliest possible stage, in other words, at the requirements stage. And I believe, as was said this morning, we must share our research and developments and families of weapons, of course, give a good opportunity for this. I believe CNAD and IEPG are doing good work along these lines and they're following up the family of weapons concept. And there's coordination through the NATO long-term plan. But I believe, because I want the ideal and I think you ought to strive for the ideal, I don't believe this is good enough. I believe this will be borne out by both the politicians, the military and civilians, we are not going to be able to afford individually or even as continents what we need unless we cooperate right from the beginning.

My final words are these, ladies and gentlemen. That for the first time in history, we in the West are planning to defend ourselves in the same war. We are doing this through a Supreme Commander and an integrated, international staff who will fight the war for us. If we have to move outside the NATO area, to the Middle East or Southern Africa or the Indian Ocean, then the whole NATO machinery won't go into operation but the deep water powers of NATO -- Americans, the British and the French, possibly the Dutch -- will cooperate together. Now if we can have an integrated, international staff to fight the war, why the devil can't we have an international, integrated staff to plan our procurement? They are going to fight the war. Surely they should be able to say, "These are the weapons with which we want to fight that war." And I believe that the Committee of NATO or some such organization should be able to say, "These are the weapons we need. Step up your own national, international, transatlantic consortia and produce them." That is the ideal, that is the ultimate. I accept the difficulties, but I believe if we can learn to fight the same war together, we

ought to be able to produce the weapons for that war together and I do not believe we are going to be able to do that satisfactorily until we do it through an integrated, international staff. Thank you.

Doctor Walter LaBerge

Thank you very, very much.

I have now collected quite a few question cards. I would hope that you would continue to send them forward and clearly the privilege of the person in my job will be to sort them in some order that tries to keep the duplication down, but keeps the prime interests represented. And so what that says is there may be some liberty taken in the phrasing of the questions and it may not sound like a question written by anybody, but the hope is it will reflect the basic interest.

And now, the fourth of our speakers, Mr. Klaas de Vries.

Klaas de Vries

Mr. Chairman, ladies and gentlemen. In my Parliament, it is good practice to let the first three speakers after lunch to allow the audience to go to sleep so that number four has a chance to attract some attention for what he is going to say. My colleagues obviously were not aware of this rule and I find myself in the difficult position to have to address you on the same issues that we have been discussing in our groups over the last 5, 6, 7 years and I think the best I could say to you, and certainly you would agree with that after I have completed my remarks, as I wholeheartedly agree with my colleagues on most of what they said.

But to fulfill my pledge to the organization that was so kind to ask us to be here, let me add a few comments to what my colleagues have been saying to you. As a matter of fact, the invitation in itself was very gratifying. I remember a number of years ago, perhaps 10 years ago, that I talked to some industrialists in my country and asked them how parliamentarians can help in defense cooperation. And they looked at me and said, "Oh, for God's sake, keep away from it." Now you invite us here and obviously expect us to be helpful in your thinking about these issues.

Let me say that the lesson I've come to in recent years is that we have to be extremely practical about what we are doing. I'm really not a big believer in great schemes, to address Bill Whitehurst. I don't believe in treaties and I

don't believe in the elaborate machinery that Carl Damm has suggested to us, although I think that in both the proposals which, of course, have been presented here to provoke your thinking, there's a lot to be found that can be put to good use.

The main considerations that parliamentarians have on their minds when they talk about defense cooperation undoubtedly are how do we take care of our security, how do we come up with the payments for the costs that security requires, and certainly, also, what are the national benefits that we will have when we pay these costs to this security.

Now, as to security, everybody knows that security is an international endeavor that cannot be taken care of in isolation. As to the costs, there are some more complications. There may be some divergence, whether spending more money is always very helpful or whether we should look for more rationalization in defense expenditure, and I think that defense cooperation is really a field in which we want to rationalize our endeavors. And looking at the costs, maybe we should add that at the moment, of course, the international situation highlights our need to coordinate and improve our defenses. But at the same time, we have tremendous economic problems. You have tremendous economic problems and the European countries have tremendous economic problems. So I don't think that we should expect that we can solve the problems that are facing us just by throwing money at them, which we have been trying in the past. I think that all parliaments, even your own parliament, which is at the moment very much inclined to look favorably upon defense spending, is going to have a very close look at the menu that will be presented to them.

So, just assuming that we will have to do with 3 percent increase that all the nations of the Alliance agreed on, we also have to realize that this 3 percent is not going to boost our efforts in hardware or in operations. In a great many countries it is used to increase wages and to improve pension rights. Of course, it's very good to boost morale, but if you have a good pension ahead of you, you might not be inclined to do much fighting before that.

Now, as to defense cooperation, I think we can easily distinguish two areas of particular interest. One is the question of division of labor within our whole defense set-up. How do we really divide the tasks that NATO is supposed to address? Of course, you all would agree that the set-up in NATO is rather historical. There were countries which had armies, navies and air forces, and they started working together. There has not been much planning in seeing who would do the best job at what places and in what instances. The developments in the Middle East have made us aware again of this concept of division of

labor. The German Government seems to have suggested quietly that in addressing the Afghanistan problem, there might be a division of labor involved. I think also that when we look at the defenses of Europe and the defenses of the United States, the Allies might get together again and see if they are really doing the job as well as they could do it and whether it would not be possible to rationalize the composition of their forces and the deployment of their forces. We have noted for a long time that smaller countries like my own country, The Netherlands, have fully-fledged forces on a very small scale. And with the tremendous overhead costs which are involved in doing expensive things at a small scale, one might consider to come to some rearrangement and see if we can't allocate the funds to better purpose.

We also want to look - and I think that's your major interest today - at the production of defense materials. The cooperation efforts have come from the desire to reduce costs through avoiding unnecessary duplication of expenditures and to improve upon what we are doing at the moment. Because everyone realizes, certainly everyone in politics realizes, that the means that are available to finance defense spending are not unlimited. My colleagues have been addressing this issue to an extent that makes it absolutely unnecessary for me to go very far into it. I would just like to add, however, that it is very important not to lose track of the real issue involved by concentrating too much on defense production in the precise sense of the word. For all countries in the Alliance, there are tremendous interests involved in defense production. Technological, political and social implications are to be dealt with and they are just as important to a great many people as the product that is the result of the production.

So I think that when we work together in an Alliance, what we have to take care of is really some kind of machinery -- and there have been suggestions made this afternoon -- that makes it possible, makes it easier over the long-run to make sure that not only countries contribute to our defense efforts, but also to some extent benefit from it. And there's no place where that machinery can be better placed than at NATO. And I must say that NATO has, in this respect, been quite a disastrous organization. The inertia, in this respect, is really not something we can tolerate much longer.

There is also concern on the part of smaller nations that the bigger nations will try to monopolize the defense market. Not because I am personally interested -- we have some very fine defense industries in our own country and I think we will be doing well under all circumstances. But because I think that the political implications of Four Powers acting as some isolated are extremely wrong. I think that we will have to

be careful that whatever the output of NATO is, it is also shared politically, economically and industrially, by all the nations of the Alliance.

We have to agree on a great many issues when we come to deal with this problem. One of the major ones is, of course, third country sales. You can't have a situation in which some countries in the Alliance declare to have an arms sales policy and other countries say, "Well, that's very interesting. Now we know where we can sell our own weapons." If we are taking advantage of the policy interests of other countries, then we are running at cross purposes and I think we ought to have a lot more political discussions about what we want to do, what our markets will be, how we are going to compete and how we are going to cooperate. Competition and cooperation -- they go hand in hand.

Then to conclude, I think that again the issue is broader than we can discuss today. I think that a major contribution of politicians ought to be to provide that context and to provide the perspective in which we have to address these issues in the future. There is one thing that has been worrying a great many of us, a great many of our colleagues for a long time. That is the deplorable economic and social situation in some of our Allied countries. I don't want to mention any names this afternoon -- they will come rapidly to your mind. And I think really it is the task of the politicians not to say, "Something happened in Afghanistan, what can we do about that?" but to look forward and say, "What will go wrong in those countries that are our allies and that want to live with us and share our values and share our democracies and our ideals, and share and participate in our common defense." So if politicians want to be successful, they probably should look ahead far more, be practical about the issue we are discussing today, defense politics, recognize that a great many people know a lot more about industrial cooperation than politicians. And try to provide a context and a perspective that will make it easier for you all to work this problem in the future.

Thank you very much.

Doctor Walter B. LaBerge

Thank you very much.

We will have about one-half hour available to us for discussion. The questions generally range in a few specific areas, particularly because of the rather interesting set of proposals that relate to cooperation, first in a treaty sense and secondly on specific programs like the TKF-90. Perhaps I might start off

with the easy ones first by asking the panelists in order if they would choose to comment on whether they really mean that they would like to have U. S. participation in the TKF-90 and whether or not a competition in airplanes is good or bad, if it can be restrained to, say, two sets of people.

Could I start first with you, Carl?

Carl Damm

Walter, I am speaking personally -- there is no obligation of my Government to what I am saying. I think really that the U. S. Air Force will have the requirement in the mid-90's for a new fighter and that coincides, more or less, with the requirement that the German Air Force has.

Secondly, the U. S. Air Force is the greatest air force in the European theater we have to work with, to fight the same battle. You can't get better interoperability, better cross-servicing and all these things, than having the same fighter. So I really mean what I have said.

Doctor Walter B. LaBerge

Do you think, though, that there is a body of support behind you as a person that could make it happen?

Carl Damm

If there is a U. S. intention to go along with the Europeans, I think there at least will be a positive answer in Europe.

Doctor Walter B. LaBerge

Very good. Patrick, would you care to comment?

Patrick Wall

Yes. I think the position at the moment is that the U. K. have got a requirement and the Federal Republic of Germany has got a requirement. It is quite asinine, in my view, for either of these countries to build their own aircraft. I hope we've got beyond that stage. Therefore, we go to see if we can cooperate with an American firm. That's fine if it works out that way, but again, your big order is going to come from the United States and the United States has not yet said that it has a requirement and therefore, I come back to my main suggestion --

we really, as an Alliance, should surely be able to decide on our Alliance requirements. Admittedly, some of us will have special needs, like the U. S. Marine Corps for vertical take-off aircraft, and so on. But I would have thought that it is not beyond the wit of NATO and the NATO governments to define the requirements. Once you've defined the requirements, then the Transatlantic Consortia or the Continental Consortia are quite easy to set up. But I come back again to the fact that somebody has got to say the requirements. Carl Damm has said there is a requirement and somebody in Britain has set a requirement, Americans say there is no requirement, and yet we're going on spending a lot of money on R&D research studies and so on, which may or may not be productive. I believe it will not be productive unless the United States decides there is a requirement.

Doctor Walter B. LaBerge

Could I though press just a little more. In a sense, all of our automobiles are the result of competition where more than one competitor exists. At some point we have enough volume to sustain this competition. MRCA, for example, was one where one believed that and the issue, I guess, is can one make it happen and should one make it happen? I was just interested in your view as to whether one airplane is better than two.

Carl Damm

If you are asking me first, I think transatlantic cooperation in the tactical fighter of the 90's, in my view, includes a transatlantic teaming - European and U. S. industries have to team -- and to compete.

Doctor Walter B. LaBerge

Klaas, how do you feel about this?

Klaas de Vries

It's a bit early, yet, to talk about this actually, but maybe we are just in time. It's a matter of requirements, no doubt, and I guess that if you are heading for a new fighter in the 90's, we'd better get together now and see if we can't produce a weapons system, an advanced weapons system, that will be of use to the United States, as well as to the Allies in Europe. A little competition there could not hurt. I think that the scale of such a procurement would allow us to have at least two prototypes, two different designs fly against each other in order to make up our minds. I would assume that any such production

would not take place in isolation from another aircraft. We will need more aircraft in the 90's and I think that on the whole, we should be able to work out an attractive working plan or scheme for production in building these aircraft that is attractive to more members in the Alliance.

Patrick Wall

Could I go back briefly to your original question, is one aircraft better than two? It is, if it is successful, and if the two are finally produced. Then, of course, if they're successful, they're better. But I believe that a joint transatlantic program in principle is much better than a continental one because if you have this it is much less likely to be cancelled. For example, I understand the Congress has put the funds back for the AVAB on two occasions and I believe it's going to do it on the third occasion this year. And if the RAF orders it, as well, I think that program is safe - I hope it is, anyhow. So from that point of view, this transatlantic cooperation is extremely good. It makes it difficult for governments, when they are in financial difficulty, to cancel it, whereas they wouldn't think twice of cancelling a national program.

Doctor Walter B. LaBerge

I will take one or two questions from the floor, if they are short, on the question of the fighter of the 90's. Failing to have any questions on that, we will have an interested and spirited attempt to see whether or not we can, in fact, make what you suggest happen.

A generically similar kind of question is, what are the chances of a treaty actually being able to be pulled off. Can you assess your countries' willingness to make the kinds of sacrifices in share of technology, in share of markets, of third country sales necessary to make such a treaty work? Can you speak not for yourselves, but how you assess your countries' willingness to do this at this time? Carl?

Carl Damm

We are already cooperating in many, many fields. The National Armaments Directors, it was said the Big Four -- I'm not happy with this expression, the Big Four countries, not meaning the Big Four men -- we shouldn't exclude the smaller countries in using this phrase, the Big Four. They know the many ongoing discussions -- not only discussions, establishing cooperative efforts -- we are already doing. So getting a framework which

gives us more flexibility to avoid the demands for in-project compensation, I think this is the necessity we are faced with. It is not the way we should do it. We are doing it. We are speaking about better ways to do it. It's not the best way to do it if we, Germany, were asking for direct compensation in the AWACS issue. It makes us unflexible and it's always creating troubles. We will be waiting in 1980 whether you will fulfill your compensation duties in respect to AWACS. We can save money and avoid trouble, we will be more flexible, if we agree upon a 5-year period within which we will establish this compensation. And I have said, in my view there should not be 100 percent compensation by the United States. If we would get 50 percent, we would be very happy in Europe, especially in Germany.

Patrick Wall

Britain is an island country and its people are pretty independent, and yet they joined the EEC, and quite rightly so, for economic reasons which were far more powerful than anything else. Exactly the same way, I believe economic facts of life are where the costs of weapons systems today are going to make such treaty as you suggest not only likely, but essential. How long it will take, I don't know. Not before 1984, probably, but we need it as soon as possible. Costs are getting astronomical. It is now recognized that individual countries can't provide their own defense. We recognize that eventually, we have an elected European parliament -- that parliament, now it's elected, is bound to want to control defense and foreign affairs in due course, and we're moving in the direction the United States moved a century or more ago. Once this happens, then you'll have more equal balance on either side of the Atlantic and I think that matters which now look so difficult become easier.

Klaas de Vries

Would such a treaty need to be ratified by the Senate?

Doctor Walter B. LaBerge

I believe the thrust of what Congressman Whitehurst says is that in asking for a treaty, one obligates the Congress to support it by its ratification, and that things which go less far than that do not bind the Congress and thereby are always subject to question as to whether or not the Congress will continue to support them. And I think that was the thrust of his position, saying that it's hardly worth having an agreement if it doesn't get to the point of having some form of congressional support.

Klaas de Vries

I would advise against it. I think we have to be far more practical. International defense cooperation will require a lot of flexibility in the future and I could write you a treaty right away that would look like a treaty but not mean very much. I think that if we want to get together, it is because we have policies that we want to coordinate and I think there are ways and means to do that without going through the hassle of having a treaty.

Doctor Walter B. LaBerge

In a moment I would take a few questions from the floor on the issue of the treaty, but I would believe that ultimately the major problem would be to convince oneself that the free enterprise system, which has operated to our basic advantage through all of our history, which allows the guy who fights the hardest and works the best to be the one who succeeds, probably would not do well under an agreement of the kind that we have talked about. Do you believe your industries would support the kind of thing that as politicians you support?

Klaas de Vries

I don't think so at all. I think industries are looking for flexibility and they might want to try a number of coordinative efforts over the years. They might want to do some research and development in an area where they make a difference with other companies. I don't think a treaty is really what we are heading for. I think what we want to do is have long-term standing commitments from governments to make sure that our defense effort is going to be an Alliance-wide effort. And I think that you cannot be very precise about that and certainly shouldn't try to draft that in legislature.

Patrick Wall

I think industry will have to speak for itself. I think industry will support anything that gives them a reasonable chance of profits and reasonable work plan, scope. After all, most of the major weapons systems now have to be financed by government. Private enterprise can't really afford them, even in your country. And therefore governments come into this and that's where you come back to the treaty concept. If, as Carl says, the treaty is too difficult and too restrictive, I put the other idea out that I've already mentioned. What I want is an international organization, not necessarily CNAD while

sitting with national hats, and therefore subject to national government. I'd like to see something much more like the Military Committee of NATO and I have discussed this with one of the former Chairmen of the Military Committee. He said that given the staff, they could produce the design requirements. Then, surely, it's comparatively easy for industry to go ahead. There's no difficulty there, as long as the money can be found. It's the requirement first, then the government has got to find the money and industry can build it. There's no difficulty in building it, as far as I can see.

Doctor Walter B. LaBerge

It's probably not appropriate for the moderator to argue with the distinguished panel guests, but let me describe two of the most militarily desirable requirements I can think of, a degravitator and a disintegrator ray. They both would be superb, we just don't know how to make them. In general, the military do not, has never been able to de-couple the cost and the practicality from the requirement, so we do need, I think, some iterative process other than just requirements, per se.

Carl Damm

If I may say, we are speaking, Patrick and I, about different things. He is stressing the necessity for so-called NATO requirements and I am following him. It's true, it would be very healthy if we could agree on common NATO requirements. But this is one thing. I am thinking about the necessity to avoid the compensations in this specific project. I really can't understand why Klaas is so reluctant to this idea. Holland, The Netherlands, when taking the Leopard II, naturally The Netherlands were calling for at least 100 percent compensation. Co-production. In this project. And that makes the Leopard II very much expensive for Holland, more expensive than it is for the German Army. Why shouldn't we buy -- this is only an example, I'm not favoring Phillips -- but why shouldn't we buy as we do fire control systems and other things from HSA? And this compensates the off-the-shelf buying of the Leopard in Germany by The Netherlands. That's what I am saying. And if we have no agreement that we will compensate within, let's say, five years instead of today, just now?

Klaas de Vries

Mr. Chairman, to avoid misunderstandings, I am very much in favor of setting up a mechanism within NATO would address that question in such a fashion. As a matter of fact, I spoke about that for a while. What I didn't particularly agree with

was the whole elaborate scheme, parliamentarians, North Atlantic Assembly, and so on, and sub-committees and committee chairmen. I think that's far beyond the horizon. What I would like to see is that NATO got moving. NATO is doing a lot in terms of requirements, but I think they could do much more in terms of getting people together and working on problems, convincing governments that certain projects are better fun in a certain fashion, and so on. As to specific projects that Carl Damm referred to, I think that one might be surprised if one looked over the years what kind of pay-offs and what kind of compensation and off-sets there have been in the specific projects. We buy a lot in Germany, of course, but the Germans buy something in Holland. And then there are different balances, also, than just military balances. The economies of Germany and Holland are very close to each other and I don't think we should become penny wise and pound foolish, that's really what I mean.

Doctor Walter B. LaBerge

Carl, we'll give it back to you in just a moment. If I could just interject, there is a mechanism pointed out by several of the questions, the NATO infrastructure that exists to do just what you're all talking about. The question is, what is the change of heart which has taken over in the last two weeks which has changed the way the infrastructure has been opposed to date in terms of increasing its applicability. It would seem to me that what you propose is sort of inconsistent with what is going on in the infrastructure, where one does do sharing of common programs.

Carl Damm

The NATO infrastructure formula includes a common fund. The various nations pay specific percentages into this fund. And then the NATO infrastructure projects are paid by this fund. I am not calling for a fund, a NATO procurement fund. I think this is too complicated, this will never happen. That would mean that we, and especially the Congress, would transfer the money into an international fund for few military systems. I never think that will happen. I am calling for -- and now I am answering Klaas de Vries again -- for this participation of the Congress in this formula because we know, everybody knows, that this stop and go that Bill Whitehurst has spoken about always happens. And to avoid that agreed purchases, vice versa purchases, governmental-agreed purchases will be stopped by the various congresses I think there should, without interference with the constitutional rights of the congresses, an obligation for each congress to consult the others before they decide to stop such procurement. And therefore I think the Military Committee of the North

Atlantic Assembly, or the sub-committee, could be the forum in which the national parliaments, or at least two or three members of the Armed Services Committee of the House or both sides, should explain their views and their reasons for, example, cancelling an on-going project. And they, in return, should get the views of the other parliamentarians to see the consequences of that.

Doctor Walter B. LaBerge

Any other comments?

Klaas de Vries

I must say, I just don't see it happening. I don't think that the United States Congress or any other parliament in the world, not the German Bundestag, is prepared to let its judgment be guided by the Military Committee of the North Atlantic Assembly. It might be an open invitation to have more members on the Committee, and that, of course, would be a great thing. No, I don't think that's really practical.

Patrick Wall

I want to make slightly a different point. Carl Damm spoke about the NATO infrastructure program and the depositions and the sharing is laid down and quite understood. Now, when we come to the other problems, problems with co-production or whatever, we haven't got a clear definition of compensation. While we've had argument with Dan Daniels' Committee of the Armed Services Committee about this, as one of the British representatives told you this morning, in our view, the British view, hardware purchases are three to one in favor of the United States. In other words, you buy three times as much as we buy from you. And yet, when we discuss this kind of thing with the Dan Daniels Committee, they said, "Ah, yes, but what about all our forces in Europe? What about what they eat, what about all the rest of it? You've got to cover all military expenditures." You've got two entirely different concepts here. I remember Carl Damm came up on this said, "What about the backing the mark has given the dollar? Do you count that, too?" So you see the kind of morass you get into unless you have clear definition and I do believe one of the most important functions of your sub-committee, Carl, and the Dan Daniels committee is to try and get a definition of what they mean by compensation off-set payments or whatever you call it.

Doctor Walter B. LaBerge

I want to thank you very, very much. I had hoped we could range to a few more subjects, but I think this was the heart of what you had all talked about in your panel discussions and probably most appropriate to talk.

Once again, may I thank the ADPA for the opportunity to get these distinguished panelists together and the panelists for joining in a very candid discussion.

Thank you.

SESSION IV

INDUSTRY VIEWS ON DEFENSE COOPERATION
AND TECHNOLOGY INTERCHANGE

Doctor M. I. Yarymovych

Now our turn has come. We've heard from the bureaucrats, we've heard from the politicians, and, of course, as I look around the audience, about 90 percent of the people are from industry. So perhaps we can now talk ourselves and express what the industry views are on the RSI question.

As you have heard from these various comments, we need to think further ahead, start our planning process earlier and particularly, I believe, one of the better ideas is to think more about co-development than purchasing of finished products. Then you don't get into those big arguments about off-sets and so on, as late in the game as we do.

We are the free enterprise society. We are the Western World. The Western democracies are built on the free enterprise system. Therefore, to us, the word "profit" is not necessarily a dirty word. As a matter of fact, it is what makes us go around. So we may want to consider our actions in those terms of how do we protect our free enterprise, our profit-making businesses. After all, when we talk about the Soviet threat, what is the Soviet threat? The Soviets are desirous of conquering the world, particularly conquering the West. I don't believe they are desirous of blowing it all up. If they blow it up, they have nothing there. They are desirous of conquering the industrial might of the West. So we are those who are threatened. We have to defend ourselves. And perhaps together, as industries, we can get a better chance to defend what is near and dear to us.

We have a panel of very distinguished representatives of European industry, and I hope our discussion is going to be as spirited and perhaps even more productive than the previous discussions were.

I would like to first introduce our first speaker from France. He is Mr. Jacques Savoyen. He served for 14 years with the French Navy and is a graduate of the French Naval Academy. Then he joined CSF and as a matter of fact, with that company he served a few years in the United States and later came back to France when Thompson and CSF were joined and became now Deputy General Manager of the Avionics Division, where he is now also Director of International Program of Thompson CSF. I will ask him to address the group for about 7 to 10 minutes

and we will go through all the other panel members in that kind of sequence. I hope later on the panel members will have a chance to question each other and I really would like to encourage you, the audience, to stand up, use that microphone and speak to us. Ask questions. Of course, send up cards with your questions, as well. Mr. Savoyen.

Jacques Savoyen

Ladies and gentlemen. I first want to thank Doctor Yarymovych to give me this opportunity to give you our views as a French representative on the subject of defense cooperation and technology. I am afraid that what we are going to say has been said many times already today. I am also a little ashamed that what I have prepared might not meet the needs of the discussion that Doctor Yarymovych explained to you. One of the reasons is I probably did not well understand exactly what the purpose of the meeting was, and I did not know that we were supposed to give a formal speech before we started the panel discussion. Yesterday night when I realized that I have nothing ready to present to you, I was a little ashamed of myself, so because I saw the other panel members having well prepared remarks, I decided to take the opportunity that when you come to this side of the ocean from France, like it or not, you have to wake up early in the morning. So I got up this morning at 5 and decided I should write something. I now realize I was wrong. I was right in the first place because everything I prepared this morning has already been said. Next time I'll do better.

Now, what could we do after we have heard the bureaucrats and the politician who have, in fact, already touched all the subjects that I wanted to bring up during my speech. However, I think that since most of the bureaucrats and all the politicians have gone to let us now discuss between ourselves, we are not going to complain about what they said this morning or request from them any action because they are not here, so we really have now to talk about we, as Industry representatives, we can do or we can propose.

I think that there are two ways of looking at the problems associated with defense cooperation and technology interchange from an industry point of view. The first one is simply to consider that RSI is now a fact of life. Our respective governments have recognized that an RSI policy was necessary to strengthen the NATO Alliance and as citizens, we can see only advantages to that policy. As major suppliers of defense systems or equipment, we very often find international cooperation extremely difficult to implement. It is an additional burden as compared with effort required for independent research

and development and production of the same system in our own country. But it is a new rule of the game and we must accept it, even if it is not convenient.

This is certainly a very negative approach. It leads to what was said this morning, that we much find mutually acceptable solutions to the problem. I don't think that as a company we should accept that approach. The other approach is to ask ourselves, do we have motivation purely from an industry point of view for supporting and encouraging RSI efforts and not simply accepting it. If after careful review of the advantages and inconveniences of corporation, we come to the conclusion that the advantages outweigh the inconveniences and that we are really motivated to support such a concept, then we can look at the difficulties - and many have been mentioned this morning and this afternoon already - in a much more positive way and find solutions to overcome them and establish a basis for profitable cooperation between industries. What could be our motivation? There is no reason why those motivations should be deferred for our motivations for any other business we are carrying out in our respective companies. The first one is, as far as we are concerned in France, that we recognize that whatever the size of our company is, we always see limitations to our capabilities, our resources, and especially in the field of research and development. We never have enough people to do what we would like to do.

Independent research and development in each country on the same subject obviously leads to duplication of efforts. Total funds available for R&D within the Alliance are necessarily limited. By avoiding duplication, the rate of technical and technological progress could be increased, certainly to the long-term benefit of our companies.

The second motivation must be found in our normal objective, which is to think in our business in terms of market and trying to increase our sales. Could cooperation lead to an expanding market for all of us? In terms of market, cooperation leading only to standardization within NATO will not lead to any benefit to industry as long as we simply share markets already existing within NATO. This could be achieved only if the cooperation brings to us the possibility of developing together new systems with which we could penetrate new markets outside of NATO that we could not penetrate otherwise.

This raises the difficult question of third country sales, which has been raised several times today and I would like to come back to that in a few moments.

Our third motivation is certainly also to maximize our profits. After all, that's why we are in business. And this morning Ambassador Komer made a remark, saying that the

necessity to enforce standardization and rationalization should come before national interests and commercial interests. I was a little surprised by that statement. I think we should try to reconcile both because we have been talking all day about how we can strengthen the Alliance against the Eastern world. We think one of the big advantages that we have against the Eastern world - and I'm not going to preach that here because that is the way you live in the United States - is because we believe in the free enterprise and we believe in the benefit of profit. We don't consider profit as an evil, as they do in the Eastern countries. Why could we not use that also through cooperation? We should not reject that motivation. This is absolutely normal and I think through industrial cooperation, we could also meet that motivation.

I think that through cooperation, rationalization of our respective production could be achieved by increasing the number of products to be produced in each country and trying, also, to enlarge our market for each field in which one company would specialize.

If we think that defense cooperation is compatible with motivation and can bring the type of benefit to our companies, and I think it could, then we certainly very strongly support all the efforts required to make cooperation become a reality.

Now, we must face the difficulty inherent to cooperation between government and industry and find solutions to overcome them. I talked first about research and development and our motivation in that area. The first type of difficulty lies in that area of research and development. Cooperation means technology interchange. Difficulties there are very numerous, especially when we talk about cooperation between an European company and an American partner. The U. S. companies generally feel that they are far ahead of their European partners in terms of advanced technology. I think they suffer more than any other group of the non-invented year syndrome. They look at European partners as potential subcontractors for production more than as potential partners for development. They feel that by transferring technology they will help establish potential future competitors. European companies, on the other hand, I assume - I can certainly speak about French companies - also certainly recognize the technological advance of the U. S. wherever it has been proven. However, they have the talents and the spirit of creativity required to participate efficiently in research and development for advanced new technology.

We want to participate in this R&D phase of the cooperative defense program and be treated as equal partners. We do not want to steal U.S. technology. We don't want to benefit from it for free. We think that we can offer also technology in exchange which could benefit our U. S. partners. However, our

engineers are not different from yours. And they are also reluctant to use technology not invented in their own country or give away what they have invented.

What is the solution? I think the solution lies in industry-to-industry cooperation through long-term business association. If we remain on a case-by-case basis agreement, limited to a single defense program, then engineers will never be persuaded to go beyond what is strictly required to meet the requirements of that specific program. The result will never be the optimized product that our defense administration is expecting from our cooperation. Each company, while participating in the joint effort, will keep thinking about its partner as potential competitors for the next program.

On the other hand, if both or several companies are assured that the cooperation will extend to other programs and that its contribution to technological advance during the program will also bring benefits for future programs, as well as it will benefit from its partner's contribution, then the climate will have been established for more open and more profitable cooperation.

However, this is not so simple to implement. Long-term agreements between companies are difficult because of another problem: the difference between procurement processes in Europe and the U. S., as was already mentioned this morning. European companies, you believe, operate under the procurement concept. The U. S. system is based on continuous competition. So a French company is never sure that its partner will remain involved in the next program. The U. S. company waits for the French or European government to tell them what company they should deal with and work with.

First, let me say that the procurement procedure in Europe is not as much a general rule as you believe. Competition is the rule of the game in Europe, as well as in the U.S. In the event that apparently at a given time only one French supplier exists, competition is periodically reopened for obvious reasons. But due to the limited market in each country in Europe, compared with the U. S., it seems reasonable to our government to avoid duplication of capital investment and research and development forms required to establish two or more teams capable of maintaining expertise in a certain field.

I think that competition could be maintained for acquisition of NATO defense systems in cooperation by encouraging the creation of several groups or consortium of NATO companies, as this has already been done for some European programs in the past. The companies could establish between themselves long-term

relationships in those consortium, the competition being held at the NATO level, rather than on a domestic level in each country.

Then we face another set of difficulties. I said we want to increase our sales through cooperation. If not, we would not see much motivation to go far in that direction. Cooperation between NATO countries by sharing development and production in different systems, which otherwise would be developed separately by each country, with its own specification, will bring benefits, as I said before, by avoiding duplication of R&D but will not increase our share of the markets in terms of dollars or francs that each company would have captured anyway. The benefit must come from third country markets, provided that all companies involved in the NATO development and production program could have access to those markets in the same condition. We have talked about that subject several times today and we did not find any solution.

Traditionally, the U. S. is extremely restrictive in letting new technology be transferred to third countries, and want to include the same restriction on technology developed in cooperation. Solution to that problem can be found only at the government level, but we must emphasize again that from a European point of view, it is mandatory to find that solution if we want transatlantic cooperation to become a reality.

We must keep in mind that the defense systems take a long time to develop. When they become operational the technology is already old technology and government and industry are already developing new technology. We think that the U. S. could be more flexible in that area without losing their technological leading position and without creating serious security problems for the U. S., as well as for the Alliance.

In any case, this issue must be absolutely discussed and clearly resolved before any transatlantic cooperative program could be launched. If we don't find satisfactory solutions to that problem, then certainly European industry will lean toward purely European cooperation rather than transatlantic cooperation. As a matter of fact, if we look at past experience, you will find many areas where the U. S. Government thought that we French or Germans were crazy to sell to some countries and now we see that you are selling to similar countries more readily than we have ever done.

The last motivation was maximizing profit during the production phase. I am not going to elaborate on that because the time is gone. I think it is a difficult problem and that implies that we solve the difficulties in cooperating with U. S. companies or other European companies due to differences in the working procedures, differences in the working process. I think that this also could be overcome only by going through long-term

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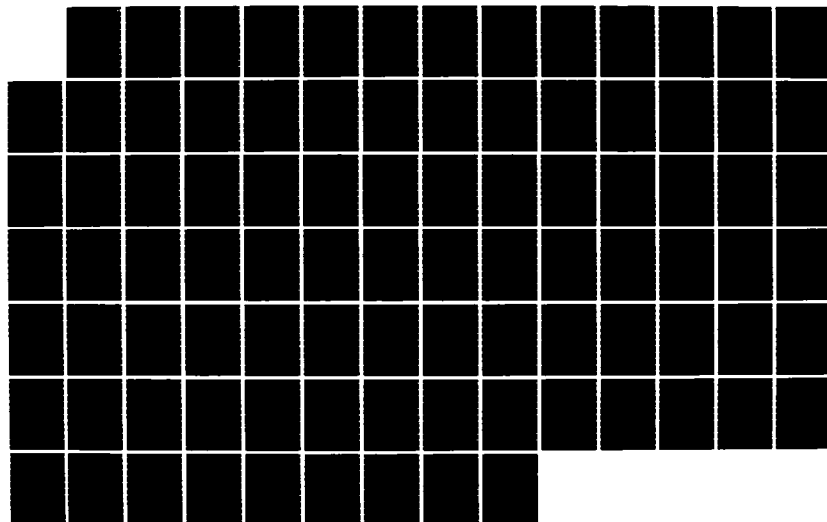
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arrangements between companies because we never solve those problems the first time. But I think that if we go with this long-term arrangement at all levels, companies will learn how to work together and at the end will find it is no more difficult to work with a foreign company than it is sometimes with another group or division of our own company.

Doctor M. I. Yarymovych

For a man who wasn't prepared to speak, he did pretty well. As a matter of fact, there must be a secret to that.

The next speaker is Mr. LeNoble, who represents the N. V. Phillips Company of the Netherlands. He was also a Navy officer of the Royal Netherlands Navy, and had various responsible positions in the Royal Netherlands Navy. He left the Navy in 1963 to join industry through a division of Phillips, and currently he is Director of Military Affairs of the International staff of Phillips. In that function, he became Chairman of the Netherlands NIAG delegation, member of the European Defense Industrial Group, Chairman of the Ad Hoc Group on Air Defense, and Chairman of the Netherlands Government Advisory Council for Military Production. I think he is eminently qualified to talk to the subject.

Mr. J. L. P. LeNoble

Mr. Chairman, ladies and gentlemen. You are largely an American audience, and therefore I would like to give you some comments especially from the point of view of European defense industry. When I say European defense industry, what in this context is Europe and what is its defense industry? Maybe we can have a look at that illustration.

If you look at the picture, you see that out of the five organizations listed, four are European ones. Gentlemen, the differences between the European countries are big and the differences between the positions of the defense industries in those European countries are even bigger. Take France. France has a broad defense industry which, in general, is strongly supported and sometimes directed by the French Government. The U.K. has a very broad defense industry also, part of which has more and more changed into a state-owned industry and therefore is also largely government controlled, but always strongly supported, maybe not as strong as they would like. Italy has status in its defense industry roughly comparable to that of France. Germany has an important, although somewhat less broad defense industry which, in general, is private industry. And of the smaller European NATO countries, you can take, for instance, Norway and it has mainly a state-owned industry and in

my own country, The Netherlands, on the contrary we have only private companies.

It is therefore obvious that the situation of the defense industry in the various European countries is vastly different. Is it therefore surprising that European results in RSI are not always very impressive? And is it therefore surprising that RSI between the U. S. and NATO Europe is such an extremely complicated problem, for which solutions can only be found with fundamental understanding of each other's problems

If we look at that list there, you see the Western European union. In the autumn of last year, this organization organized a well-attended defense conference in Brussels, and I will come back to what was, in my opinion, the most important statement made at that occasion. For those of you who want to know more about ideas about a European armament policy, I would like to recommend the so-called document 786, published on October 31, 1978. Rapporteur was Mr. Julian Critchley, Member of British Parliament. I have read many papers on RSI and I have listened to many speakers. This really is one of the best available papers. Of course, it does not and cannot give a simple and quick and overall recommendation for the solution. However, it is, in the first place, an outstanding historical survey. It is written in a very positive attitude, and its general recommendation, gentlemen, is that RSI in Europe is to be concentrated in the IEPG.

Now, every move to the EURO group, which was there before the IEPG, you see that France was and is not a member. Therefore, one can almost by definition say that a EURO group eventually never can achieve a really European defense procurement cooperation.

But let us not forget as an illustration, what they did do that the joint procurement of the F-16 by Belgium, Denmark, The Netherlands and Norway, was a EURO group initiative. The IEPG, on the contrary, has practically all European NATO countries as its members. Whether the IEPG, in the end, will replace the EURO group remains to be seen, because in my experience, these kinds of organizations never die, nor do they totally fade away.

Now, the European economic community, the EEC, or let's say Europe, the common market, the terms of reference of the EEC make it impossible for this organization to involve itself in defense problems. However, I come back to that WEU conference last fall in Brussels. Because what happened - you know that Europe voted. The European Commissioner for Industry said very cleverly, "Yes, but defense industry is part of industry and industry comes under the competition of the EEC." You cannot say, when you look at that list, that Europe has not tried.

But as long as NATO exists, standardization of equipment to be procured has been under discussion. And never more so than in the last few years. We all talk - and sometimes we talk our heads off - about two-way streets and transatlantic dialogue and rationalization and standardization and interoperability and long-term defense plans, etc. etc. Now, Doctor Perry, on quite many occasions, explained very clearly the American TRI program, and I think that program, in itself, is a great step ahead in NATO cooperation. And one aspect of that program, as you know, is dual production. Now it is obvious that the U.S., in case of a conflict, does not want to be cut off from a European supplier. Yet, I think that in some cases, dual production is not the definition necessary. But that equipment could be procured directly from Europe and after all, when the ADPA invited us here to speak, they said, "Can you be constructive?" I tried to be like that and they said, "Can you be provocative?" So with your permission, I would like to play the role of the devil's advocate.

Let me give you an example. Some 15 years ago, the U. S. Navy selected weapon control system from one of the Phillips companies for their PGM program. Now weapon control is not a user's article, contrary to ammunition. Yet, the U. S. Government decided that it had to be U. S. manufactured. And what further happened is that the American licensee Americanized the design, although mind you, gentlemen, the Phillips company had used exclusively American MILSPEC components and parts. Can you imagine what happened to the price? It tripled. May I give you another example. ROLAND. If the American army uses ROLAND in the European theater of operation together with German and French forces, why then Americanize ROLAND? The German and French industry would gladly have supplied any amount of spare parts for the whole lifetime of ROLAND plus all maintenance assistance further required. And if the U.S. had simply bought ROLAND. I am sure that the French and German Governments would gladly have procured American defense equipment for about the same amount of money without insisting on Europeanizing it. A wise man said, "The better is the enemy of the good." Everybody, in this way, would have profited: the armed forces, because they would have really completely standardized equipment; the American, French and German industry would have profited because now they would have nice, long production lines and that's what we all want; the American, French and German Governments would have profited because they would have avoided dual production and they would have saved themselves considerable money.

I would like to draw your attention to yet another successful program and that is the multi-national Seasparrow program. And that really is a remarkable program. Why? Because it is a multi-national program based on single-source production. Not dual-source production, single-source production. And again, I

say I understand that from the American point of view, from a security point of view, there is a strong preference for dual production and that maybe many times dual production is a must but it is not always a must.

May I therefore try and list the possibilities which are open to us - and I have tried to put them in preference.

One: international cooperation beginning in the development phase. Teaming up of European and American industries should take place in the earliest possible phase.

Two: direct procurement from the other country, preferably under avoidance of Americanization or Europeanization.

Three: licensed production of complete systems.

Four: in multi-national programs, production on a single-source basis.

And last, five: in bilateral or multi-national programs, production on level-source basis.

Gentlemen, in one of my more cynical moods, I have, in the past said, "What NATO really needs is a good, old-fashioned scare." That scare is with us today, militarily, politically and economically. And let us - and I mean by us, the defense industry - let us make good use of our cooperation possibilities so that we can make ourselves and our allies stronger and safer. Thank you.

Doctor M. I. Yarymovych

The next speaker is very well known to many of us. Professor Gero Madelung, the President and Chief Executive Officer of MBB. He was born in Berlin, educated in the United States, where he got his Mechanical Engineering degree at Clarkson Institute in New York, then finished his studies in Munich. He worked for the General Electric Company in the United States before returning to Germany with ever increasing phases of responsibility in Messerschmitt-Bolkow-Blohm. Of course, his major achievement was the Managing Directorship of the Panavia Aircraft, which he took upon himself just when the program started and brought it to a rather successful conclusion when he went back, finally, to MBB to be Managing Director of the Military Aircraft Division and so on, until, in 1978, he was elected President and Chief Executive Officer of MBB. I would like to introduce to you Professor Madelung.

Professor Gero Madelung

Doctor Yarymovych, ladies, gentlemen. Being pretty late in the program and expecting that so much will already have been said on the subject, I did as Mr. Savoyen and prepared notes as the meeting went along, so please excuse me if this is not an entirely fluent paper.

We have heard of various forms of the future transatlantic RSI cooperation which is envisaged on the official level, to start out with the family of weapons concept - a new concept - to continue with the collaborative and co-development or co-production and even co-support, I would suggest, like we do in Europe in important programs. We have heard of the dual production concept, which involves, for industry, either a relationship as licensor or as licensee, licensee in full or in part. And, of course, still the form of straight production from the U. S. or from European industries.

I have experienced all these forms except the first, the family of weapons, which is new, and want to comment on some of these forms.

First, when we do all these forms of business, we don't do so because it's the easiest and most convenient way of doing business. It is sometimes quite cumbersome to do these ventures. But we do it because it is the way to serve the defense market. As an industrialist, I have a preference as to the form of program and the preference is to be in a program where we can contribute and generate our own design right. And this, in some areas, as I expect will be the same with many of your companies, is just a need for survival in the market. The U. S. attitude, unfortunately, has from time to time been that the European industry can contribute only marginally in the defense technology and this, apart from not being true, has not helped the further cause of RSI. I have to admit that the same attitude has, in part, existed also between the European countries and industry. The NHI affect, which is prevalent worldwide. But in doing collaborative programs for the last 20 years in Europe, mainly, and I don't have to enumerate the many programs which have been done, and having done many programs with the same partners in Europe, in the meantime, there is a continuity of joint ventures. This has established a mutual respect of contributing and a mutual respect on which we can build in generating new projects. It is this mutual respect which we have to generate in an increased scale also with the United States industrial partners.

In the U. S., collaborative development, co-development is sometimes suspect of being non-competitive and this is not true, gentlemen, and I would like to invite you to come and visit us and have some of our ventures explained to you. As a

partner in an industrial partnership, you are expected, in these European programs, to contribute, contribute in terms of technology, which you have developed as background and foreground, contribute in low cost economics, contribute in meeting schedules. And if you don't perform, you are not a welcome partner in the follow-on projects. This applies to the companies and certainly to the people in the companies involved individually on these projects.

Now as to some of the specifics mentioned...the family of weapons concept. I expect to be involved with my company in the anti-tank weapons family as a partner in the EMPG, together with our partners in France and Britain. I do hope that we will develop in this family of weapons concept, a mechanism to fully understand the U. S. requirement, which is, in this part of the anti-tank weapons, not in the lead as the European lead, but still we feel they are, hopefully, our customer and we must avoid not fully respecting their requirement just as seriously as we respect the requirement of the immediate European sponsoring nations. A mechanism for this has to be developed.

Vice versa, on the air-to-air family of weapons, my company will be on the user side. We are not in this branch of business on the weapons side. More on the aircraft and the fighter side. And I expect that we gain the access to also the U. S. side in fully understanding the requirements of integrating, in this case the AMRAAM, into our projects. A mechanism has to be established much superior to past mechanisms in this area, where we have had rather terrible struggles.

In one of the themes mentioned a few times, the collaborative and transatlantic tactical fighter development and production and, I think to really make sense, also support - a fighter for the 90's - I have personally invested effort since the mid-1960's in this area and, in fact, as a younger engineer directed one collaborative effort, and again invested a lot of interest in the 70's and still do so. It may be, and this was expressed by the government officials this morning, that this scale of project, of a full-fledged tactical fighter, is really too ambitious to succeed in the next generation to come around. But as industry, we remain open-minded to any serious intent in this area. In the meantime, I think there are a number of smaller projects around in which we are interested. For example, in the area of drones. This may be a scale of project not so emotionally loaded as a full-fledged fighter project.

On the interoperability aspect of weapons, I want to emphasize a personal view, which is that for the tactical aircraft, this is a most important area. We need in the NATO Alliance to make sense in effective aircraft weapons systems. We need to be sure that all the major and important aircraft weapons can be carried on both sides of the Atlantic and this should be

the point of big effort. Having also experienced this on a smaller scale, I think a lot of manpower really has to be invested to achieve this, but I strongly urge that this manpower be invested. I do this, and this may seem strange, even though my company is involved also in the aircraft air-to-ground, air-to-ship weapons area, so it might seem that I am generating unnecessary competition for the company in making such a suggestion. But I think it is such a huge and important area that we will put the interoperability factor way on top and I am sure our engineers will also be able to contribute in a fully interoperable weapons suit.

Finally, I think we have to keep open-minded in straight buying of good components and services from the U. S. like we have done in the past. It is a very straightforward process if you can obtain the clearances on it on advanced equipment, and we are talking about advanced equipment. At the same time, I expect that things will continue vice versa with the other European nations and I have to offer helicopters, for example, in this area.

Now, let me summarize. The luncheon speaker, General Lawson, and also Doctor LaBerge, made a plea for fast action. At the defense industry, we have in the past sometimes missed that urge of fast action on the part of the procurement agencies.

I want to close, therefore, with an optimistic note that with this sense of urgency, we should achieve a real advancement in RSI. Thank you.

Doctor M. I. Yarymovych

Thank you Gero. That was a very Statesman-like speech, and I'm collecting a lot of cards and a lot of very pointed comments, so I'm really looking forward to the discussion that is going to come very soon.

I'd like to introduce Mr. T. S. Allan from Canada. He is the President of the Computing Devices Company. He came to that from a very long, distinguished career in the military, where he spent 34 years in the Armed Forces and finally retired from the task of being the Chief of Engineering and Maintenance for the whole of the Armed Forces in Canada. Mr. Allan.

T. S. Allan

Mr. Chairman, ladies and gentlemen. Like a good naval officer, I will follow the Chairman's direction and that was

one, to be provocative and secondly, to keep it reasonably short. But being a naval officer, I will also treat those directions with a certain amount of liberal interpretation.

With respect to being provocative, I find I have a difficulty. With all the widespread international tensions that exist today and have escalated in the last few weeks--we have various wars in Africa, we have genocide in Southeast Asia, we have hostage-taking as a form of international negotiation, we have economic war being staged by OPEC, and lastly we have an invasion of Afghanistan--anything that I could attempt to say that would provoke you, I think would fall flat.

Let me then address the topic of cooperation and technology interchange and I would like to start by first reviewing our strengths. We've been fairly critical of our performance and rightfully so. But let's look at the positive side for a moment. We do have a NATO joint staff, both military and political. We do have a NATO joint staff college where that staff is trained. We do have NATO exchange students at all the national staff colleges and schools that I'm aware of. We do have joint programs, admittedly with difficulty. AWACS is one, F-16 is another. We do have a NATO naval squadron that has operated successfully for several years and, as Doctor LaBerge pointed out this morning, we do have and continue to have various joint field exercises at all levels.

The result of all these things is the fostering of mutual respect and the formation of lasting friendships which generate an atmosphere for more cooperation. So why, then, do we score a failing mark?

I think one reason is our voting citizens, and ultimately that's who we're responsible to, our voting citizens question not the need or the value of NATO, but rather question the effectiveness of recollective military expenditures. We can and must do better in these areas. We must achieve an adequate defense posture to contain the threat at an affordable cost -- and I underline affordable. I don't believe there is any basic disagreement with those premises.

So what should we do? If we have certain things going for us and we score ourselves a failing mark, what should we do? Having spent most of my life in the military and, as you all know, the military have a certain regard for politicians, which I don't need to elaborate on, I find, to my horror, that my basic thrust of my suggestion this afternoon is closely parallel to what the political speakers were alluding to. So I find it rather horrific; however, I think we should concentrate on having a joint staff in NATO that agrees with operational requirements because that is where it all begins. If you don't have agreement on the operational requirement, then we should

not be surprised with such controversies as the smooth bore versus the rifled gun for a tank. Any why is that? Military staff officers are bright - no question. They're well educated. They're disciplined. They're determined. They are encouraged at staff colleges and staff schools to be innovative and free-thinking. So why should we be surprised when these various staff officers are closeted in all the NATO national defense headquarters buildings spread throughout all those countries and they're given a defense problem to solve at the national level. Why should we be surprised when they come up with 14 or 16 different solutions. Each of those solutions is embedded in a nationistic or sovereignty based political philosophy. Therefore, we should try to create an operational requirement or generate an operational requirement in the NATO context in a NATO headquarters by NATO staffs. And I think that will go a long way to solve some of these nationalistic/sovereignty problems that we are continually faced with when we're trying to agree on what an operational requirement is.

Now, if we get to that Utopia where we can agree on a realistic operational goal for NATO in terms of equipment, then I think we have to set realistic schedule goals for the approval of the operational requirements, because bear in mind these will have to get approved by the various political bodies. We also should set a realistic schedule goal for the necessary research and development and procurement, and there should be commitment to that total program at the political and military levels. Clearly, they have to be sensible and review milestones to make sure the program is still tracking and still realistic and still within its cost goals. But nevertheless, there should be that commitment at the beginning of the 10-year procurement cycle that is consistent and that will last through the 10-year program. You don't want people bailing out at critical points. And that's very important. We don't want people to go through the motions of standardization, only to pull out when the political pressure comes on at some future date.

That is probably the long-term Utopian goal. In the interim, what can we do to get the RSI principle established? I would argue that we should choose candidate products or programs for joint development and procurement. Select pilot programs. And I guess when I say candidate programs, I really mean ones that are not so large, like the tactical fighter, that you are going to run into political opposition and difficulties which are real, but choose one that is small enough that people can avoid some of the NHI type factors, some of the political factors, yet small enough that it is not a controversy. And I think in choosing those, the lead has to come from the major NATO partners, and bear in mind I am speaking now as a Canadian, what I would classify as a small NATO partner and representing

an even smaller defense industry in Canada. So I think we have to look for the lead from the major NATO partners, who will then involve the smaller members as full partners, and by that I mean we share the risks and we share the benefits, and share it on an equitable basis.

Once this political or bureaucratic lead -- and I don't mean bureaucratic in a negative means, I mean it in a positive means -- once the political bureaucratic leads have been taken, then I think the large industrial concerns must exercise leadership and, indeed, statesmanship in making it happen. They have to give up a little bit. They have to forget some of these risks in transferring technology, because their fragile industrial partners in the small NATO countries need help. They need help in how to run some of these programs and how to run a development schedule and how to do some of the integration.

Now, this is achieved in part by technology interchange, which leads me to the next point I would like to make. How do you achieve technology interchange? Well, we're a small country, at least we are a small business in a small country. We work, our bread and butter, is in the export business. As an example, we export 80% of our products. And the only way we do it is by cooperating with large industrial concerns. And the way we have achieved some degree of success is not because somebody has legislated to the large industrial concern that he shall transfer technology. No, how we have achieved it is by lining up with determined people who have a mutual respect, almost on a one-for-one basis -- engineer-to-engineer relationship -- between the large donor industrial concern and the small recipient. The objective must be to ensure that the end of the interchange period, the technology resides in an existing company, in the host country, and the donor expatriates or nationalists have returned to their original industrial concern. Once that bridge has been formed, then I agree with my colleague. I think it's relatively easy, then, to perpetuate that.

If we do it in this way, I think the nationalistic sensibilities are not bruised, the NATO industrial infrastructure, I would argue, is broadened, it's made more resilient, more flexible.

I think I would be remiss if I did not address a problem which we all face and that is, and I think particularly here in North America, our poor productivity performance. If we're going to have an affordable defense in the face of the threats, then I think we have to look to our productivity, as well. Remember, our voters do, I believe, understand the threat to our security, but they're not going to give us a blank check. They want sensible, adequate, affordable defense. And without addressing our productivity problem, I believe our defense capability will be curtailed.

Mr. Chairman, I have no glib solution to the problem of productivity. But let's at least recognize that it is a serious problem which must be addressed and that, indeed, is the first step in finding a solution.

In closing, Mr. Chairman, I thank you for asking me to participate. I found it to be a pleasure, stimulating, and look forward to your questions. Thank you.

Doctor M. I. Yarymovych

Thank you for some very, very good thoughts.

Our last speaker for this afternoon is Alan Greenwood. He is Deputy Chairman of British Aerospace, having been Chairman of British Aircraft Corporation since 1976. He sure came a long way. He started Vickers-Armstrong, Ltd. at Waybridge in 1940 as a flight test observer. He was one of the original Air Frame Directors for Concorde, and Director of Sepicat, which is the company that developed the Jaguar. And then in 1969, he became the first chairman of Panavia. He has a large, long list of honors and achievements, which I will not take the time today to recite. But I give you Alan Greenwood.

Alan Greenwood

Mr. Chairman, ladies and gentlemen. I am very grateful, indeed, to have the opportunity to talk to you this evening. I am even more grateful than I thought I was going to be, because at the end of a long day when about 18 people have spoken on this subject, there's not much left for me to say. I've been busy tearing up my few words, and I'm sure you'll be glad to know that.

It did seem to me that there are one or two things left, which if I may speak fairly frankly, I want to put before you. Of course, this subject was chosen for us and because I'm a pretty uneducated, simple sort of engineer, I thought I'd have a look at the Oxford English dictionary for its interpretation of the words "cooperation" and "interchange." I think we all would agree, even those of us who are educated in Cambridge, Massachusetts or Cambridge, England, the Oxford dictionary is a fairly authoritative book. Well, if we look at "cooperation," we see, "working together to the same end." If we look at "interchange" we see "exchange things with others." Well, now, really, Mr. Chairman, that's a far cry from what's going on at the moment. If we are honest with ourselves, that really does not equate at all with what's going on in cooperation, particularly across the Atlantic, and it's a poor shadow, too, in many

ways in Europe. May I declare my interest, first of all. I am a very dedicated European for reasons which far transcend any industrial advantage. I think you only have to look back over the European history of this century to realize why.

But I am also, Mr. Chairman, a very grateful friend of the United States of America. It has been my good luck, earlier on, to have served with the United States Navy and for 25 years, we have had a company over here with which I've been associated.

So what I am going to say, very briefly, concerns airplanes. But I think probably much of that refers, also, to sophisticated defense equipment. And after what went on this morning, I'm jolly glad that there's no such thing as a smooth bore airplane.

Mr. Chairman, it seems to me that there are two main obstacles to overcome, or at least inhibitions, to fuller technological cooperation. The first is political. Let's face it. There is a real reluctance and sometimes a very marked reluctance, to interchange technology for reasons of national security. And sometimes this reason is given when, in fact, the reluctance is commercially and politically motivated. This is a jolly complex problem, of course, but one which I believe needs a great deal more thought, if we really mean business, and surely we do mean business. It's a matter more of government, perhaps, than industry. It's a problem that just won't go away.

The second obstacle is commercial and Mr. Savoyen put his finger absolutely on it. If he does this well at 5 o'clock in the morning, I can't think how he does at 8 o'clock in the morning. He was great. Of course, in the commercial sense, no individual company, and probably no individual person, will relish sharing -- which often means giving -- its hard-earned technology to a partner who may be transient and who may become a potent future competitor. Nor, quite understandably, do governments give much support to exchanging company technology, which itself has been gained from nationally-funded research programs. To do so would put it at its lowest, leave them open to political criticism of making gifts to others with their own tax payers investments.

Now these two obstacles surely are the nub of the matter. So why don't we face them a bit more objectively, a bit more honestly. Without trying to pass the buck from the industrial into the political arena, it seems to me to be beyond doubt that the plain duty of the governments of the Western Alliance is to set the pattern which industry must follow. If governments, for a variety of reasons well known to all of us, fail to be single-minded in their resolve to harness all our potential on both sides of the Atlantic, how can we expect our national industries to do other than follow their ambivalence? I was

encouraged by what Mr. Whitehurst said this afternoon. I think he faced that one very well, indeed.

Surely, also, it is very simply demonstrable that in those instances where the international political will has been clear, then our aviation industries have very successfully entered into partnerships which have and which will continue to produce the goods. By partnerships, I don't mean massive sub-contracting. By technological cooperation, I mean a full partnership where each of the partners enters from the creative first instance of the airplane, the design, the development, the final manufacture and shares profits or losses. That's the only way a real partnership takes place. And the most recent example of that, I think, has been the creation of the Tornado in the Panavia Company, where I have had the privilege of serving with Gero Madelung for something over 11 years, where the three nations and the partner companies were involved right from the beginning. This program has been successful and now I say, without beating about the bush, it has also brought its own rewards to some substantial sectors of the American industry. Now, Panavia surely is the pattern for the future. Mr. Savoyen said that only by having long-term arrangements would companies share their technology and share their know-how.

Mr. Chairman, having trailed my coat and will no doubt be torn to pieces in the discussion, which I fully deserve, may I just end with a few rather random but hopefully constructive suggestions.

As I said, where programs have brought together partners, how do we keep them together? Let's face it -- we're all in it for the money, amongst other things, aren't we, so really I believe the right way to do it is for those companies who feel they have common cause to form joint companies, not by exchange of share holding, but by forming a joint company in which they can carry out a series of military or, indeed, civil projects. Aerobass Industry, in the civil field, is a good example of that. My company is a full share holder, we hold 20 percent of the shares and we will share in the profits or the losses, the disasters and the triumphs of that company. That's going to be a long-term thing and we are there for many decades, I believe. That, I believe, should be the pattern.

Then, in that sort of atmosphere, one is much more willing, I think, to interchange one's technology and one's know-how. It also provides a much better basis in which one can exchange senior and variable personnel. This, you know, we are reluctant to do. We rather tend to -- and I know, because I've been exchanged -- send a second-rate chap out to go and do these international jobs. The case is not the same with Gero Madelung. Messerschmitt came up with a key man to run Panavia. That, I think, is a splendid example of what we need to do.

Governments, perhaps, for their part, could do more to confide in the companies at a much earlier stage in international programs. And I'm thinking particularly of those cases where these programs are controlled by memoranda of understanding. And, of course, these memoranda don't do the trick completely. It often happens that the political decisions have been taken and then we find the message hasn't really got down the line. There are all sorts of problems about security clearances, and so on down within the organizations. These are very time consuming and very frustrating, and those of us who have struggled with that know exactly what it means. But these memoranda can facilitate or hinder the interchange of technology and really, we need all the encouragement we can get.

Then in truly international programs, there must always be a military operational compromise. So governments can help immensely by keeping the multi-national specifications broad and the level of bureaucratic supervision to a minimum. Otherwise, as we all know, time scales suffer and costs suffer, and not surprisingly, the whole program becomes open to political criticism. We can all think of examples of that, I am sure.

And then governments also need to recognize more fully from the beginning the very complex effects on international programs of currency changes, of various degrees of inflation and lending rates and differing national standards.

Many speakers from this platform have talked about the cost of international programs in terms of money. No one, and I am surprised about this, has said that we have a limit in the Western world of brainpower. And I happen to believe that men are rather more valuable than money. We only have so many people in the Western world capable of creating these sort of programs. Surely, we ought to pool that great advantage that we have.

And then lastly, sales. For all of us, I think our export business is vital. The exporting costs of a single national defense product is much easier than a multi-national one, not least because of security problems. Maybe some governmental thoughts could be given to this aspect of our international business. We all need to export, we all need to do it on an equal basis. But you know, as General Lawson said at lunch today, we need to watch our collective political spheres of influence because this is one way in which we can build up a very special influence of help to the Western Alliance. And it's no good if one moment we're all rolling on the floor in competition with another, at the disadvantage of our Alliance, and then find what we ought to have done was to close our ranks and sold our products to a certain part of the world. He had

in mind, I'm sure, the Middle East, but there are other parts of the world, as well.

So, Mr. Chairman, thank you very much indeed for listening to me. I've gone on a bit too long. It's always pretty unenviable to be the last chap, but thank you for your patience and for your stamina.

Doctor M. I. Yarymovych

Thank you very much, Mr. Greenwood.

I have about 20 questions here and we will try to economize on time. Don't run away yet. We'll be finished in about 10 or 15 minutes, unless the audience wishes to stay.

The theme seems to have been going through the presentations that there's really a need for a long-term association, for partnerships and the initial conceptual phase process, and the exchange of technology, which to a large extent, of course, means exchange of people, exchange of brains. You don't transfer technology, only transplant brains. All of that counterposes the expressed desire that maybe we should work with simple ideas, simple procurement, and that perhaps cooperation on the long-term European aircraft, for instance, is too complicated and we should shy away from that.

Now, with that thought in mind, the first question seems to indicate some uncertainty about how you develop joint requirements. Somehow in Europe it has worked over the years, with some very successful programs, the Tornado and the Jaguar being two examples. But now Europe is facing a new airplane. So the question to Messrs. Madelung and Greenwood is could you please comment on joint requirements involving an attack objective and an interceptor objective. Is not the resulting multi-nation project less effective than two single-purpose aircraft?

Professor Gero Madelung

We are still in this process of getting the customers together on their requirements, rather than forcing them on their requirements, working a bit like you do in the commercial aviation business, where when we do an air bus, as an example, we have also quite diverging requirements of airlines, and industry plays a role in making the customers understand where they can either have a very special suit, entirely custom made but in smaller numbers and higher costs, or they can have a suit

which will also fit other customers and thereby get some economy, and this is the process we're in.

Alan Greenwood

I think, Mr. Chairman, that really the matter of the development of operational requirements is matter enough for someone like myself, but for the air staffs, but it does seem to me that when one recognizes the development cycle of a new airplane is likely to be at least 10 years, probably, from start to getting into service, it's jolly difficult to foresee as far ahead of that exactly how you want your airplane tailor made. And there is, I think, a very great advantage in having an airplane with a multiplicity of roles so that when the time comes you have a great deal of flexibility.

Mr. J. L. P. Le Noble

I think we all have suffered in the past, and it was said today staff officers are people, but they also have their hobbies. I was a staff officer and I wrote requirements. But at that moment, I never realized what was the direct result if I, instead of 3DB, said 3.5 DB. So there is a new procedure in NATO which unfortunately so far has only been applied in some Navy projects. But the start of it is as follows.

First, there is written a very general overall operational objective. That is, half a page of paper, very general. Then industry is invited to do a pre-feasibility study and say, "If you do that, the consequences in wage, money, etc., is that and if you do that - - " and you see what are the results. And also based on that pre-feasibility study done by industry, only then the requirements are being written and then we follow the normal procedure.

Doctor M. I. Yarymovych

More on the subject, there is a question again for Messrs. Madelung and Greenwood. Both MBB and British Aerospace actively pursued application of the Tornado to the U. S. ETF requirements. The results achieved in gaining a good understanding of the ETF requirement? Are you convinced from this activity the U. S. was serious about stated objectivity in applying a foreign aircraft to this requirement?

Alan Greenwood

As far as I can see, as soon as the ETF saw the Tornado, it disappeared out the window.

Professor Gero Madelung

I have nothing to add to that.

Doctor M. I. Yarymovych

Mr. Savoyen received a question regarding his statements on third country sales. With all due respect, don't you think there are some legitimate reasons why certain countries should not be sold arms under third country transfers? France has the reputation that they will sell arms to almost any country. Is that reputation justified? Would French companies really agree to cooperate with American companies knowing there would be restrictions on selling to third countries?

Jacques Savoyen

I think there are at least three questions there and they can be answered in the same way. The first, yes, I certainly think that there are legitimate reasons why we should not sell arms to certain countries. But the problem is, our respective governments at a given time, don't have the same perceptions of the political situation in a certain area in the world. I say, at a given time. Let me give you an example. Some years ago I was here in the United States, invited to a dinner party. There were about 200 or 300 guests at the Waldorf Astoria, when President Nixon apologized to President Pompidou because he had some further due to the fact that we had decided to sell Mirage to Libya. This seemed to you to be absolutely impossible that such thing could be done. Today - and the reason was that at the time we sold, in France it was necessary to support the Arab world. Today I read in the paper that Israel complains that you are prepared to sell more arms to Egypt than to Israel itself. So, you know, in time perception of the political situation changed. So, for legitimate reasons one government today does not see legitimate reason to the other. But in the principle, yes. And we all agree that we should not sell arms to the Eastern world. However, right at the moment I also heard that you are taking preliminary steps to cooperate in the military field with China. At the same time, the French Government refuses flatly to consider any sale of aircraft to China. So, you know, there is no simple answer to the problem. You said France has a reputation of selling arms to anybody. I can tell you, I've been involved in the export business for many

years now and you would not believe how hard it is sometimes to convince my government that we could sell. I have a lot of difficulty sometimes in that area, and I think as much difficulty as your U. S. companies have. In France, we consider that there is one country which has that reputation, which is England. We think England has a reputation to sell arms to anybody. So we can argue all afternoon.

The last question was do you think that France would not agree to cooperate with an American company if there is restriction on third country sales. Yes and no. That depends what the restrictions are. If they are too extensive, yes, certainly. We would be reluctant to do that. Also, we already in the past agreed to cooperate with U. S. companies knowing that there was limitation to export sales. So I think this should be dealt with on a case-by-case basis and we are not the only partner in that discussion. Our governments have a role to play.

Doctor M. I. Yarymovych

The subject of third country sales is one of the big bones of contention in any major cooperative venture and I wonder if some of the other panel members would like to express themselves on this subject. Professor Madelung, do you have a point of view on this?

Professor Gero Madelung

Well, it is well known that Germany is particularly restrictive on third country sales. This is a difficulty for our industry.

Doctor M. I. Yarymovych

Mr. LeNoble has provoked a flurry of questions and I will pick out one that is representative of a few others on the ROLAND. If the U. S. had not Americanized the ROLAND and had performed a EURO production based on French specs, and had agreed to purchase its spare parts from France, what U. S. system do you think France would have purchased from the U. S. under the same conditions? Incidentally, we should correct the fact that ROLAND is not just a French, but is a French-German product.

Jacques Savoyen

I was about to say that you should remind Mr. LeNoble that ROLAND -- also my company cooperates in the ROLAND program -- is a German-sponsored program and we are glad to participate.

J. L. P. LeNoble

I think to answer that there should be present a French or German Government representative. It is not that I said that instead of the solution chosen, ROLAND should have been completely co-manufactured in the United States. I said, no, it should have been procured from the U. S. I indicate to some of the statements made by Mr. Carl Damm, and he mentioned, I think from the German side, quite a number of possibilities which Germany is considering and has procured from the United States. There is no European country, when you look at the balance of sales with the United States which is not on the negative side.

Doctor M. I. Yarymovych

Well, of course, the question tends to lead to the general perception that is quite often voiced in the United States industry, in the light of ROLAND, do you believe you will ever sell any European-produced hardware into the United States. And another similar question is, is the U. S. really prepared to rely on a production source located 3,000 miles away in Europe. Some of the answer to that is that a lot of this equipment is to be used in a NATO environment, so the production is not necessarily away from the scene of the action that much. But perhaps one of you gentlemen would like to continue that thought.

J. L. P. LeNoble

Suppose that the Dew Line were to be completely modernized and let us assume theoretically that there is an outstanding radar company called Company X in Europe, why shouldn't the U.S. Government buy the radar from Company X if it is better and cheaper and gives the all-singing, all-dancing solution for the Dew Line problem? It is not a user's item. You buy it. You have spares. You maintain it. And you do not really need, apart from logistical aspects, you do not need a supply.

Jacques Savoyen

I would like to comment on those questions. On the first one, yes, I think there is a possibility for a European company to sell European-produced systems or equipment in the States. We have a recent example in France. sold a helicopter to your Coast Guard.

On the second question, do you think that the U. S. would agree to rely on something produced in France, 3000 miles away, spare parts and so on. I am very surprised by that question.

We have been talking about the NATO Alliance all day. If we are prepared, in NATO countries, to consider, for example, the German Army is going to be responsible for defending a certain area of NATO, and we believe and we trust they could, how we would not trust a company to provide in time the spare parts and equipment which is necessary for the U. S. Army. So if we really trust each other and we belong to an Alliance, I don't see the point.

Doctor M. I. Yarymovych

Very good, very well taken. I was going to also add to this, how do two companies cooperate when one of them is located on the East Coast of the United States, the other one on the West Coast? That is also about 3,000 miles away.

Now a question to Mr. Allan. Previous agreed NATO military operational requirements produced poor results, for instance, the G-91, Atlantique, NATO Basic Military Requirement No. 1 for Mobile MRBMs. What political, economic and military lessons can we draw from those past projects?

T. S. Allan

I must plead ignorance of the specific programs, but I would suggest that probably the environment in which those operational requirements were drawn up was less than perfect. In other words, there wasn't a political will to follow through, there wasn't the necessary compromises from a nationalistic point of view to agree on the requirement, and I would also question the yardstick by which those programs came up with a failing mark. There are many other benefits to be gained by cooperative programs than just the performance of the end system. So I would probably like to examine the assessment of the failure before I comment further. I think we can look to some of the problems that other joint programs have got into to probably draw a better conclusion. Let's talk AWACS, for example. I think the resistance to AWACS came not because it wasn't a good system, but I think the resistance came because the U. S. was trying to sell into Europe a given operational equipment to meet a perceived operational threat, as viewed from the U. S. Now, whether that perceived threat was accurate or not, it takes quite a time to convince the other nations that that assessment coincides with their assessment. And until that process is gone through, with all the political ramifications, you're going to get resistance to buying of given weapons systems. So I think the process, and this was my argument, the process has to get started away back in the beginning, so that you go through those hurdles in a timely manner and don't present a fait accompli to another NATO partner, because it's

just going to run into resistance.

Incidentally, I was going to comment on third country sales. Canada has a very clear policy and we've never had an argument with it. And that is, we'll sell to anyone who doesn't need arms.

Doctor M. I. Yarymovych

Is there anyone from the floor who wishes to ask a question or make a comment? No.

For the sake of saving time, I have a few more questions here that are kind of specific to a particular person. There is one question about a document reference to Mr. LeNoble and a question to Mr. Savoyen. If those questioners would later address themselves later on directly, we could save some time. But there is one that perhaps would be very constructive to discuss. It applies to the price one pays for cooperation. The question is, it was noted that through the application of MILSPECS, the price of European product was tripled when Americanized. Will the current NATO major effort utilizing common or equivalent specifications or standards eliminate the need for Europeanizing or Americanizing joint program products? Mr. LeNoble, would you care to comment on that and I would like to then carry on from there to Gero Madelung and maybe he can share with us his experiences of what the extra cost is of going into a joint program.

J. L. P. LeNoble

Let's define what is a joint program, Mr. Chairman. There are so many possibilities. There is no doubt that dual sourcing whether any off-set obligation or not, substantially increases the price. We are thinking of an increase in the order of 20 percent or so. That is one reason to avoid that solution. Americanizing or Europeanizing -- there's no doubt that it substantially increases the price. Why improve a design which has proved itself to be quite good? Why re-invent the wheel? When you say on a joint program, when this is done on a really cooperative basis that the companies involved really contribute in their best-qualified areas and there is a good division of responsibilities, I see no reason whatsoever of cost increases.

Professor Gero Madelung

I can only confirm that. In these international projects, you apply more people, maybe, than you would in a national project and you cover a somewhat increased spectrum of requirements than you would in a tailor-made suit for an individual

air force customer. But we have the experience that if you have more people with different backgrounds looking at the engineering solution, fewer mistakes are made. People really have to stand up to questioning from their partners whether their solutions are properly thought out and whether there is enough test and other analytical evidence to support their solution. This has been quite a beneficial effect. It takes more lead time, but overall it is beneficial. And certainly, the greater quantity -- take Tornado. If it had been done by a single nation, it would have been limited to around 400 aircraft buy, so this way it's an 800 plus aircraft buy. That makes a lot of difference in economy.

Doctor M. I. Yarymovych

We were talking about the benefits of cooperation and Mr. Greenwood has been addressing himself to the competitive aspects that are lurking as a danger when you start sharing. We have been experiencing a very interesting phenomenon in the United States aerospace industry in the last couple of years where there is beginning to appear a strong shortage of technical talent, technical manpower. So actually, there is a greater desire to share because there is more to go around than we have the ability to do. I wonder if this same phenomenon is beginning to appear in Europe and, therefore, a more open association between industries will become possible. After all, within Europe, there has been always good cooperation, as evidenced by these projects without too much fear that one's partner will become one's competitor in the near future. Why can't we have the same feeling among United States and European companies. Do you have a comment on that?

A. H. G. Greenwood

I did say, I think, that all the other speakers had talked about shortage of money, the strain on money, but nobody had spoken about the shortage of brainpower. I don't know what Gero would feel about it, but I think there is a real shortage in Europe of people who can take part in all the very complex areas of sophisticated programs, both in the engineering, the research, and, indeed, in the manufacturing areas of programs. We're finding in Great Britain that there are acute shortages in those areas where we share the expertise with other industries. For example, there is a great shortage of electronic engineers. They are obviously in great demand all over the world because they are used in many other industries. And this is, I think, a very potent reason why we should take collaboration extremely seriously.

Jacques Savoyen

I would think that the situation is quite similar in France, especially in the electronic field. And when I said at the beginning that one of our motivations is to better utilize our human resources in R&D is precisely due to that situation -- shortage of experienced engineers in the electronic field. And that certainly is one strong motivation for better cooperation and avoiding duplication of R&D effort.

Doctor M. I. Yarymovych

Thank you very much.

Well, on that rather positive note, where we see a common need in our defense, we see a common threat to our entire existence of the free enterprise system, and we also see an industrial need to cooperate. I believe, perhaps, the industry can lead the way to join together on a long-term basis into partnerships that will generate a better, stronger defense for the NATO Alliance and the threats that are now broader than just the NATO world.

I hope that these thoughts were useful to be elaborated upon and the record that will have been made of these proceedings will be carried to the Government representatives who, because of the lateness of the hour, weren't with us to hear us. But I am sure they will read the report.

Thank you very much, gentlemen, and I look forward to seeing you tonight.

February 1, 1980

Breakfast

Barry Shillito

Good morning. It's really a pleasure for me to have the opportunity to introduce our speaker this morning. I made the comment to him at breakfast that when I found that I was going to have this privilege and his office sent me his bio, that it was the shortest, briefest bio on a political figure that I've ever had sent to me. This tells you a little bit about the individual. He's a very humble guy, an individual who has made it a point not to really beat his own drum too much. At the same time, those of us who have a chance to know him recognize the impact that he has made and is making, as far as not only the United States, but the world.

Dan Daniel grew up in Mechlinburg County, Virginia on a tobacco farm. He has had a myriad of political jobs. In addition, he has moved through Commerce and started out at the very bottom in the Dan River Company many years ago, rising to the position of Assistant to the Chairman. He again moved into politics, as I said. He has been both in State and Federal politics. In 1968, he was elected to the Fifth District of Virginia. As we were talking this morning, he made the comment that since 1970, he's been unopposed in his portion of Virginia. He's a member of the House Armed Services Committee. He chairs the special sub-committees on NATO, as most of us know, and the non-appropriated funds activities. In addition to the many other things that Dan Daniel has been involved in, he has been both State Commander and National Commander of our country's American Legion. He has served on our President's People-to-People Committee for 12 years. He has had many awards, many recognitions, by many countries, including Italy, France and others. Most of these things are tied to his beliefs, his recognition of principles, particularly our Constitutional principles, his conservatism, and his attitudes as far as strong national defense is concerned.

Last evening, I was talking to Mel Laird, our former Secretary of Defense, and I mentioned to him that Dan Daniel was going to be our speaker this morning. Mel went on and on about Congressman Daniel, about many of the things that I touched on, about his integrity, his being totally dedicated to the well-being of his country, hard working, patriotic, and so forth, and he went on and on about this and finally said, "You know, he's just one hell of a guy." Congressman Dan Daniel.

Congressman Dan Daniel

My goodness, Barry, with an introduction like that I feel like the Okefenokee Swamp boy who fell in the barrel of molasses and said, "Lord, give me a mouth equal to the occasion."

Ladies and gentlemen. I should say that you probably should hold your applause until you hear what I am going to say. But it is a great pleasure to be able to be here with you this morning. It's always uplifting and inspiring of soul and spirit to have the opportunity to visit and associate with men and women who provide the jobs and the payrolls for our country, who pay the taxes to keep our Defense Department in operation. And I don't know what greater honor that one could have than to appear before an audience such as this. You don't get the credit that you should get, but for whatever it's worth, I'm very proud of you.

If there are any Canadians in the audience this morning, I wish to express to you the appreciation of the Congress for your recent favor to some of our citizens. We're grateful to you far beyond our poor power to express.

Since I arrived this morning, several people have talked to me about all the speeches that have been made, so I find myself in somewhat the same position of these two preachers that I heard of once. There occurred a vacancy in the pulpit in a large city church and the list of candidates to fill that vacancy had been reduced to two. For comparative purposes, the congregation decided to hear both men on the same morning. So by lot, Preacher #1 arose and delivered a beautiful oration on Spurgeon's great sermon on "Love." And as he spoke, Preacher #2 sat in silent disgust because he, too, has memorized Spurgeon's great sermon on "Love." But just before the number one man had concluded, a smile and look of accomplishment came over the face of the number two man and as he arose to speak, he said, "You know, it just occurred to me that in a church as large as this one with so many members and such a diversified program, the greatest asset a man could have would be a keen memory. And to demonstrate my fitness for the job, I'm going to repeat word for word that which was said by Preacher #1."

The truth of the matter is I doubt if anyone has said what I'm going to say this morning. When our Committee first began to meet with the European parliamentarians, we agreed among ourselves that we were going to be very candid in what we had to say. We hoped that most people would like it, but we knew that some wouldn't. When the General wrote and asked me to come this morning, I asked him what he thought I ought to talk about. He said he thought I ought to talk about 30 minutes. I valued his judgement so highly that I had decided to accept it until I read this new beatitude, "Blessed are the brief, for they shall be reinvited."

At first we failed to recognize the sound for what it was. Against the thunder of crashing guns and clashing armies in Southeast Asia, it was little more than summer lightning. But the guns of Vietnam fell silent and the armies melted away. It was still there, still growing in intensity, until at last the source was unmistakeable. Once more we hear the sounds of jackboots on the march in Europe, reminiscent of the boots of other days, the clanking sound of armor massing for the attack, the high-pitched whine of revving engines on scattered air-fields. They are familiar sounds. From the West, a different sound is heard. It is of soft, but steady voices in symposia; of ministers negotiating memoranda of understanding, substituting cooperation for competition; of governments explaining defense budgets in social context. And above all, it's the interminable rhythm of planning, of armies created on paper, but always to be funded next year. It's ironic that Western Europeans, who know full well the sounds of battle, should so easily ignore them. For once more we face a determined enemy, willing to pay the terrible price of achieving its military and political goals in our time. It's a nation which has acted with cool deliberation. It's a country which can point to a series of gains, suggesting that the tide runs in their favor. It has been given cause to wonder whether we believe the prize is worth the price. And what we face it with is an Alliance of Nations seemingly incapable of such resolve and unwilling to look reality in the face. And this is the context I would suggest to you in which we must consider NATO Rationalization, Standardization and Interoperability (RSI).

For well over two decades, the United States' strategic superiority freed Western Europe from the obligation to defend itself seriously. Its principle function was the maintenance of a tripwire force as a connecting link to our nuclear deterrent. And somewhere along the way, our Allies forgot the lessons of the past and began to think of United States dominance as the permanent order of things, instead of a phenomenon of the moment. In short, they got used to the idea of America picking up the tab. For European political leaders, this was the best of all possible worlds. In the absence of any serious requirements to defend themselves, European leaders siphoned off defense dollars to finance national health programs. Elaborate social legislation was passed to create the government planners' dreams of labor force stability. In recent years, however, a new and frightening world has developed. U. S. strategic superiority has been consciously neglected into something we refer to as rough equivalence. And the mooring of that nuclear shield has exposed a vulnerable, thin red line across the face of Western Europe. Clearly, NATO's conventional forces are inadequate to the task which could confront them. Not in the nineties, but now, in the eighties. And if we do not attend to this business at hand, there may not be any nineties to contend with.

NATO Europe is not totally to blame for our lack of Alliance preparedness. While detente is a noble concept, it's about as practical in today's world as unilateral disarmament. And if NATO Europe has been neglectful of defense spending, neither have we been generous in providing the needed dollars for defense. Nor has NATO Europe been unhelpful, as witnessed West Germany's assistance to Turkey and to Greece, and actions by the United Kingdom in routing out the Soviet guerillas in Oman. I submit, however, that the recognition that times have changed has come in this country, albeit slowly. Events have overtaken the concept of detente. The Administration recently did a dramatic turnaround on the question of defense spending and proposed real growth in the belated effort to face up to new realities and to new threats.

Unfortunately, our European Allies, for the moment at least, seem to be going in the opposite direction, backing away from even the modest 3 percent commitment they made in 1977. The most flagrant examples are West Germany and Denmark, which have flatly stated that they will only plan a 1-1/2 percent real growth next year. The Defense Minister's explanation is not that West Germany cannot afford it, but rather, that West Germany's security is not threatened. I would suggest to you, ladies and gentlemen, that freedom threatened anywhere is threatened everywhere. More recently, Chancellor Helmut Schmidt has expressed displeasure because General Rogers had the audacity to lay it on the line, to tell it like it is. To look at present conditions in the world and see no threat is to be willfully blind.

In the field of arms cooperation, it is not sufficient or acceptable to say to the Congress and to the American taxpayer that we should buy less capable or more expensive systems of European design because it will enhance political solidarity or yield some abstract battlefield benefit because of interoperability. I submit to you that no one can quantify the military benefits of buying fewer systems at greater cost, which seems to be the experience to date in the majority of our efforts in arms cooperation.

A fundamental problem is that the European defense industry is not competitive with our own. Manufacturing efficiencies are subordinated to the goal of maintaining long, stable production runs. We know this, the Europeans know it, and at heart most of our arms cooperation initiatives acknowledge it also.

The emerging philosophy of such ideas as the family of weapons concept is to replace international competition with cooperation. That is, agreeing not to compete. I am frankly frightened by this, because it says we are moving toward two procurement standards -- a competitive domestic environment and a cartelized international environment.

Rationalization, Standardization and Interoperability have been around since the birth of NATO. The thing that bothers me is that we seem to be ignoring history in assuming that this time the rhetoric will produce results, that this time the plans will materialize.

Let me give you an example of why I am disinclined to accept the premise that this time things are going to be different. In May of 1978, the Administration announced with a great deal of fanfare that NATO had just completed or committed itself to a far-reaching, long-term defense plan. Several months later, our NATO subcommittee asked country by country, year by year, item by item, what our Allies had committed to buy. The Department of Defense was unable to describe any specific commitments. A year later we asked the Defense Department to give us a status report on Task Force Five, the Long Term Air Defense Plan for NATO. We discovered that it has never been approved and submitted to the Allied heads-of-state or parliaments. Why? Because the consensus was that the costs were so great that the plan would never be approved. I think it might be pertinent to ask how much is freedom worth?

From its inception last year, the NATO subcommittee has been seeking to strike a balance between hard cash, near readiness objectives and S&I goals which often seem to be payable in softer currency. In fact, our Subcommittee has refused to take the easy road and accept all the motherhood rhetoric of RSI. This does not mean that we are opposed to cooperative RSI. Rather, we feel that this must be done. But it must be done on a hard-nosed, realistic basis. The American people will and should demand that they get the best possible defense for their tax dollars.

Recent events give cause to believe that things will not work out that way. In the spirit of cooperative development and in order to placate French politicians, we have just bought a weapons system which is less than desirable and, in fact, less than adequate to its purpose. We have been repaid by verbal backing and filling in the matter of joint actions to display concern with Russia's recent actions. In a matter as straightforward and painless as a boycott of the Olympics, the French have declined to participate. It comes as no surprise, therefore, that French President Giscard d'Estaing does not want to lose his country's, and I quote, "special relationship" with Moscow. Bismarck once said, "The word gratitude is not to be found in the international language."

Let me say again that the NATO Subcommittee strongly supports closer cooperation with our European Allies, which will produce tangible military benefits and results. One clear example of this is the passage of H.R. 5580, the Host Nation Support Act. This legislation is vitally needed to enhance near term readiness and training capability. This will by no means be enough

to accomplish Alliance goals. Doctor Ellen Frost has correctly identified the deficiencies in the present approaches. And many of us await further developments of her proposal. The NATO Subcommittee has no desire to be an obstructionist. Neither do we intend to be anyone's patsy. Doctor Frost has offered us a challenging area for exploration.

In closing, let me say the words that I have spoken here this morning are not the words I would have used just one month ago when General Miley invited me to be here with you today. But events have tumbled on top of events to the point that a simple and, I hope, reasoned assessment of NATO RSI is not enough for this group or for this time. The invasion of Afghanistan is a clear sign of a departure of Russia from the earlier mouthings of peace. Russia has the goal, has acquired the military capability and now has displayed the audacity to undertake militarily the conquest, if possible, and the strangulation, if necessary, of the free world. While we talk of family of weapons, Russia builds weapons of massive proportions, and positions them to threaten Western Europe. While we debate the two-way street, Russia makes its own military highways. We plan, Russia acts. And those who are most directly threatened persist in conducting business as usual.

Ladies and gentlemen, we stand on a bridge afire at one end and smoldering on the other. How close must the flames get before those who occupy that bridge recognize the peril? The challenge is awesome. To meet that challenge, we must rediscover these basic truths: that freedom does not perpetuate itself, that liberty is more precious than life, and those who would keep the peace must be strong enough and bold enough to deter those who would break it. The question, I think, that confronts all of us is whether we have the wisdom to recognize and the will to act upon these truths.

Thank you.

Barry Shillito

Congressman Daniel has offered to take a few questions from the floor. After that speech, I would have to say there is a lot to think about.

Congressman Dan Daniel

Barry, I was asked to be provocative.

Q: Congressman, from the way the Defense Department has operated in recent years as far as their planning for defense, it seems as though they are tempering all their planning to what dollars they think they can get from Congress and, assuming that that is the proper way to plan -- and it has worried some of us who have lived through several wars -- that they should think of what actually is required to defend this country and to win any conflict. I would like to see if your viewpoint is somewhat the same and perhaps the Congress can inspire our military to plan adequately without regard to the dollars initially and try to show what the differential is and what dollars they have and what is really required.

Congressman Dan Daniel

Bill Perry can tell you that you sound exactly like a member of the Armed Services Committee. That's been one of our basic complaints recently that DOD comes up and as you indicate, submit their budget on the basis of what they think they can get, or more properly, what OMB will approve. We don't think that that's a good way to prepare to meet the requirements of this country and to meet our commitments. So I'm in complete agreement with what you have to say and the vast majority of the members of the Armed Services Committee share that view.

Q: Mr. Speaker, I had the pleasure and the honor to lead 100 outstanding industrialists in an industrial study on air defense. One hundred people from both sides of the Atlantic representing 40 well-qualified defense industries. We did this work efficiently, quickly, well-motivated, and free of cost and we spent almost \$1 million dollars. We have made fast recommendations. Because you refer to Task Force Five, that responsibility was taken over by the Air Defense Planning Group. Let me assure you that per today that group is throbbing with energy, that very ambitious and realistic proposals are now in the hands of the top of NATO, and that NATO only has to say the word "go" and industry will do a terrific job on that.

Congressman Dan Daniel

I am thoroughly convinced of that and I am very grateful to you, as are all the members of Congress. We are familiar with the work that you've done and it is unfortunate that things in government move so much more slowly than they do in industry. That's one of the most perplexing problems that I've had since I've been in Congress, and I think this applies to most members who came out of industry, that in industry you produce economically or you die. In Congress, you die if you do produce.

Q: Congressman, will your committee on NATO continue its work this next session?

Congressman Dan Daniel

Yes, sir, we will continue our work, at least during this session. As you know, this will probably be a relatively short session because, as Doctor Eberhard and I talked a minute ago, this is a political year in his country and in ours. So I expect it will be rather a curtailed operation this year. But we do continue. We are very much interested in the proposal that has been made by Doctor Frost. She is now preparing a second paper for implementation of her proposal and, quite frankly, we are going to await that paper before we outline our plans for this year. On its face, it appears to have some merit, so we will await that effort.

Other than that, I think that what we're going to do now in the face of world conditions, is perhaps to put most of our effort on readiness. That's going to be done in the field of O&M. We are terribly deficient in our O&M accounts, as you know, and that's not the fault of DoD, necessarily, it's more the fault of Congress than it is the Department of Defense.

Q: I am not familiar with Doctor Frost. Could you be so kind, sir, as to identify who she is and who she is working for and the nature of this report?

Congressman Dan Daniel

Tom Callaghan can - Doctor Frost, of course, is in the Department of Defense. Tom is more familiar with it than I am. I've read it one time and that's why I said that on its face it looks good.

Doctor Thomas G. Callaghan, Jr.

Doctor Ellen Frost is the Deputy Assistant Secretary of Defense for International Economic Affairs. She has prepared a memorandum which, until recently, was circulating only within the Pentagon, now has been lately circulating in industry and we included a large part of it in Allied Interdependence Newsletter Number 18. She points to the attitudes of the Europeans placing more emphasis upon employment than on defense, points to the need for a harmonization of American and European attitudes, says that despite an enormous amount of energy by government and by industry, the results are not much more significant than Secretary Komer described to you yesterday. And she said maybe we ought to step back from RSI and take a look at a much bigger picture, step back from a project-by-project approach and take a look at a common defense market in which many projects could be undertaken at the same time, in which a structure would be established which would free the energies of industry to carry out the objectives of government, rather than having government involved in every single detail of every single project. I don't want to usurp Mr. Daniel's time. I recommend to all of you that you read her memorandum. It's very well done.

Congressman Dan Daniel

Thank you, Tom, for your assistance. Quite frankly, I don't know or we don't know what position we'll take with it because as I indicated, we have only read it over one time. But it does, at least, offer another initiative.

Yes, Doctor Eberhard.

Doctor Hans L. Eberhard

Only a short remark. Mr. Daniel, we have had some discussions in the past and I thought we had agreed every coin has two sides. Thank you very much.

Congressman Dan Daniel

Senior Senator Byrd used to say that any speech that had a short beginning and an early ending was a good speech. Thank you, Doctor Eberhard. That was a good speech.

Barry Shillito

Mr. Congressman, we thank you very, very much for being with us this morning and for a very stimulating speech.

SESSION V
STRATEGIES FOR THE FUTURE

Doctor V. Garber

(NOTE: Technical difficulties were again experienced at the beginning of this Session.) Doctor Garber, introducing the first speaker, states that Doctor Fubini has been at very senior positions, has been Deputy DDR&L in the Department of Defense, Assistant Secretary of Defense, and is a very valuable and valued consultant, not only to industry but to governments. He is now Chairman of the Defense Science Board, where many of his ideas continue to stimulate us in figuring out what our directions for the future should be.

Doctor Eugene G. Fubini

Good morning, ladies and gentlemen. Since I could give this speech in French, Italian, German and English, I think I am reasonable representative of the "I" of RSI.

We have all heard many times the numerical comparison between the NATO and the Pact forces. I know as well as you do that with few exceptions, the Pact forces outnumber us. And in preparing myself to come here, I decided that it might be worthwhile to look back in history and determine whether superior forces have always won. Well, they haven't. If you don't mind, let me take a few minutes to remind you of history you all know very well.

A little bit more than 2,000 years ago, a country much smaller than the state of Connecticut, under leadership of a young man then 22 years old, conquered against immensely superior forces -- and now I'm going to use modern names -- Turkey, Georgia, Iran, Afghanistan, Pakistan, India. The Empire of Alexander the Great always covered Libya, Egypt and Syria. It is clear that the forces against which Alexander the Great fought were far superior to his. But that is not the only example. Rome was a city. And the maximum population for Rome in the early two centuries of the Empire was half a million people. And yet, they conquered North Africa, all that we know now as Western Europe, and the northeastern portion of the Empire of Alexander the Great.

There are more examples. controlled Western Europe to the Oder River. Napoleon always fought against superior forces and won, except when he went against Russia, when actually the

forces were about even and then he lost. And there are more examples. The Crusaders, with inferior forces by about ten to one, established the Kingdom of Jerusalem. King Gustaf Adolph of Sweden conquered a good part of what is now Poland and Norway.

I don't need to give more examples to make the point which I would like to establish beyond historical doubt. To America, superiority is neither necessary nor sufficient to win. What does it take to win? Is it morale of the soldiers, their leadership, their motivation? If you look at the morale, you will realize that there is a fundamental difference between NATO and the Soviet Empire. And let me use the word "empire" because that's what it is. If you were the leader of the Russian portion of the Soviet Union, you would count and find that already now the Russian population is inferior to the sum of the population of all your vassals, you would worry. You see, we tend not to put ourselves in the shoes of our potential enemies. I think we should. Because if you ask yourself why is it that the government of the Soviet Union is so tightly centralized, you would, I think, find that you would do exactly the same thing if you were in their conditions. They are surrounded, within their own country, by potential enemies.

The Communist Doctrine is self-defined as a dictatorship. By the way, I think it is the only political system which defines itself as a dictatorship. And certainly this Doctrine is ideal to implement the centralization. The centralization of the government, then, is an intrinsic part of the fiber of the Soviet Union. They can't change it. But look at it. It applies not only in the political sphere but in the military sphere, as well. Operations and exercises are based on extremely detailed plans. Let me give you just a few examples. The performance of a fighter pilot is not measured by the results he obtains, but by the accuracy and conscientiousness with which he follows the plans. A defector told us that when he flew a particular airplane, his main task was to take off and land. But most, if not all, of the operational steps were taken from the ground. This procedure would be an anathema to our pilots.

A plan of battle that the Soviet have filled in in excruciating detail is brittle. If I were to use technical terms to which I am accustomed, I would say it is very, very subject to single point failure. And it may be worthwhile to examine at least one example of single point failure.

Our command and control on the surface is not very impressive. But behind it, there is a back-up. It's the spirit of those who fight for the defense of their own country. Theirs, on the surface, is magnificent, but behind it there is an essential political weakness. I submit that when we think of the possibility of fighting, their tactical command and control is more important than tanks. Their command posts and their tactical communications are more vulnerable than guns, and they are much more important targets in terms of overall affect.

There are many things we can do about attacking tactical command and control. But this is neither the place nor the time to give specifics. But it is clear that we can attack with hard weapons but we must always remember that command and control can be deceived, exploited and jammed.

I suggest that our strength and their weakness is a free association of free nations, and that RSI is one of its symbols. But just one. I submit that the "I" of RSI, interoperability, is not only a technical concept dealing with communication channels or other equipment, but it is also fundamental strategy for us, which if you don't mind, I'll summarize by paraphrasing the saying of an old American patriot, "Either we fight together or we all hang separately."

Thank you very much.

Doctor V. Garber

Thank you, Gene.

I would like to now introduce General Fabio Moizo. He is the Armament Director in Italy, Secretary General for Defense for Armaments. He has had long experience, starting with the Second World War as Commander of alpine troops in the Eastern Front against Albania and the Soviet Union. Since that time he has been instrumental in developing air and artillery and light alpine troops, progressed in a variety of commands. He is no stranger to the United States. He was stationed here as Defense Attache in Washington and finished General Staff College in the United States. Since that time he has been a very close associate of Doctor Perry and myself and the armaments cooperation business. We find him to be a very constructive man and it is my personal pleasure to introduce General Moizo, who was also the past Chairman of IEPG and is now free to tell us his views candidly on the prospect for European unity in armaments cooperation. General Moizo.

General Fabio Moizo

Gentlemen. I must confess, as Doctor Garber says, that I am a professional soldier, have been a professional soldier for a long, long time. So some ideas that I am going to express to you will be sometimes a clearcut military type idea. Please forgive me for that.

It seems not to be a secret that the nuclear parity can prevent but not exclude a war in Europe. While the quantity of conventional superiority of the Warsaw Pact gives it operational options, these are very disturbing and dangerous for us. Furthermore, the Soviet Union appears to be reducing the technological

gap and diminishing progressively the quality so with respect to the West. On the other hand, the national characteristic of Western Europe nations dissuade from aiming at the numerical parity of the permanent instrument of wars, that is, the war instrument in peacetime, because of the limits of the social and economic nature of peacetime deployment and even of training in crowded Europe. So the best solution consists of maintaining and increasing the quality level of our forces in every field -- more professional logistics and as an indispensable base, that of armaments material.

The progressive worsening of quality ratios between East and West does not seem justified by the total amount of funds committed to R&D by both sides because they are generally equivalent. More than that, we heard yesterday Ambassador Komer quoting that the funds available to the Atlantic Alliance are higher than those available in the Warsaw Pact. Evidently, something is not working fine because the investment of the funds is characterized in Europe, mainly in Europe, by disbursal and national sector realities.

Apart from any other consideration and from a purely theoretical point of view, the ideal solution would be to arm all our forces with one identical kind of equipment and in this, pops out a little bit of military thinking. This solution, in fact, would also enable us to optimize the investment of funds devoted to R&D by concentrating them only on one kind of equipment and to make a large scale production and constantly to reduce the average cost. This is substantially what Ambassador Komer was stating yesterday, too. But that was in the East, enabling the Warsaw Pact to considerably reduce the quality inferiority.

But such a matter cannot be adopted in Western Europe due to a number of factors that even if known, I would like to briefly illustrate because the work of IEPG is and will be strongly affected by them. As a matter of fact, each nation tends to produce itself as much as possible at least a portion of the necessary equipment for its forces during peacetime, and to keep its armament industry at the highest technological level compatible with the capacity of the country. Also as an important factor for the general industrial development.

So, there are serious obstacles to rationalization. First, European industry armament is characterized by pluralities and over-extension with a production capacity much larger than what is necessary to meet European market requirements. This has led the governments and industry to seek additional industrial outlets in export and they like to underline that this kind of export of weapons today is extremely remunerative in order to get raw materials and energy on the foreign market. Also, the limit international mobility of organized labor renders difficult those operational and industrial conventions which are suitable for

optimizing the European production. Also, European countries already have many short- and medium-term projects at an advanced stage of national development with different types of technology and for which substantial funds have already been committed. Furthermore, many of these projects are sometimes influenced by export needs. It is, therefore, very difficult, if not impossible, to abandon those projects or to harmonize the aspects which make them different.

Finally, as for the necessary unification of the military requirement for equipment, many actions have been taken and many are in progress within both CNAD and IEPG to develop common planning systems and procedures to harmonize in time the technical operational characteristics of the weapons systems to reach a common model. However, experience has demonstrated that even where common military requirement has been defined, the results have nevertheless been negative because of a series of national difficulties. It is enough to record the various kinds of European tanks of the same generation we have in Europe. In fact, against common requirement approved military level, a political-industrial decision is often set up which prevents the attainment of this same model in every interested country.

These are no doubt negative factors affecting the common European behavior in the receding R&D. But I think there are also some positive factors. Assuring a high technological level of armaments means having the significant funds for R&D and this cannot be done by everyone. Due to the different political, social and economic conditions of the various countries, it is expected that investment in R&D, even in comparison with the gross national product, will remain very different. Apart from national interests and with a slightly cynical point of view, such a situation can offer opportunities which are to be exploited. In fact, only a few countries are able to develop significant weapons systems, while the nations with fewer capabilities must adopt such systems developed by the other countries, thus contributing to the standardization. Also, the age of European equipment of this same generation is very different. For example, while in the Federal Republic of Germany the Leopard II is almost ready, Italy will go on introducing the Leopard I for two more years. This permits us to scale in time the production of a given model with considerable industrial benefits given by the continuity, mainly if the production lines are differentiated. For instance, while one line starts with the production of the new model, the other line, that of another country, goes on with the production of the old type.

The considerations which have developed up to now have already led to an association in varied forms of the national firms appointed for their realization of those collaborative efforts. These multi-national polarizations for the moment around the major problem no doubt represent a substantial step toward the rationalization of the European process in the field of R&D. But it is also clear that this must not lead to a

reduction of the industrial and technological production capabilities of the nations not involved in that project. It is, therefore, necessary to think out well-designed European plans which, taking into account the adequate share of the received development and production work, permit the preservation or, more important, the improvement of industrial capabilities of the nations not involved in that cooperative effort. After all, what has already taken place in individual countries in the field of the rationalization of armaments production should also take place in Europe.

Those among us who are a certain age can remember well how, until the immediate postwar period in the inventory of the armed forces, there were many kinds of arms directed to the same employment of the same generation because they came from different national firms.

Today it would be inconceivable for an armored force at the European level to have in its inventory different types of tanks or aircraft of the same technology. It would be impossible. So, if the political wheel or European parliaments and governments acquired the necessary I really think that the process of rationalization on our continent could take place, as well as already happened in the individual nations.

So I will say here there are political, military and industrial factors at the same time who are responsible in Europe for European armament, should exploit every suitable chance to increase common projects while leaving off the dreams and only conforming to the reality. This is the aim of the IEPG and the aim of each of the bodies. Everybody knows that we are the panel who examines the armaments replacement schedules for European countries to identify any opportunity for cooperation. In doing this, we also take into account the work conducted by other organizations, such as CNAD. From this activity, indications arise about the identified opportunities and proposals to set up groups which will evaluate in detail the possibility of cooperation among the countries that have shown common needs. Those schedules are also passed to the NATO Armament Planning Review, where the information is tabulated together with similar information provided by the United States and Canada to form a full schedule covering all the CNAD nations. The activity has already achieved many results leading to the establishment of specific groups and the most significant of them can serve a new tactical combat aircraft, a new family of European military helicopters, and anti-tank guided weapons, which I will deal with later on.

Panel Two coordinates the exploratory and groups getting out the detailed examination of the options indicated by Panel One. The kind of system quality and evaluation cover eleven different areas. The results up to now are limited but it should be remembered that IEPG has really been operating for only four

years while the R&D main production cycle requires a much longer time and while the short-term common acquisition of material is centered by national interests already well consolidated. So it takes time and we have not so much action in the present.

Then we have Panel Three that meanwhile elaborates a series of procedures, principles and guidelines to be used in the practical realization of the IEPG project and which take into account the national interests. This is a very important and delicate matter. In particular, accomplishment of guidelines for the realization of projects, including criteria for competition in its various aspects, for the sharing of costs and work, for the inter-project compensation, for the comparison of price, etc. If we become operative, a lot of IEPG problems will be solved.

Second, many of the principles to be used by IEPG groups in the various places from the formulation of the targets to the procurement. Also, protectional interests of the country which has less developed defense industry, in their participation to the cooperative project through adequate compensated measures. And then we have the Russell Report in which there has been developed criteria and procedures for delineation of the pilot nation for development of cooperative projects, as well as the consequences and responsibilities for the country designated as the pilot nation.

We have another important group. There is a group that deals with the problems connected with the dialogue between the two sides of the Atlantic, and in particular with the various elements of the direction proposed in 1978 by Doctor Perry.

Most IEPC countries have stipulated bilateral moves with the U. S. and cooperation in this sector is going on in a satisfactory manner. As far as dual production is concerned, the progress is limited, both because of technical and economic difficulties and because many of the systems proposed by the U. S. correspond to European systems already in advanced stages of development. However, a good example is given by the European production of the air-to-air missile 9L Sidewinder while a clear interest exists in initiating similar activity on the surface-to-air missile situation. On the European side, the product underlined was a Sidewinder developed by three nations under Dutch leadership. This has been proposed to the United States.

During the past few years, under examination the possible reasons for the lack of assistance and cooperation. For example, the following factors are charges pertaining to the Government of the Republic of China: the wage and families are considered to be the main reason for the lack of assistance on the part of the Government of the Republic of China. It is well known.

forums, mainly political forums, it has been hoped for a strengthening of the IEPG by creating a structural administrative level, or at least an IEPG Secretariat. As it is known, it has additionally been hoped through the and the Critchie Reports that the IEPG be strictly connected with the Western European union and especially with the European economic community as far as the technological and industrial problems are concerned. They are insisting that weapon systems production are so connected with the general industrial output that because those organizations have the capacity to inquire and to propose means to improve the general industrial capabilities, the examination of the activities to improve the weapons systems production because part of the general industrial outfit will be to their interests.

IEPG is a little bit reluctant because not all the IEPG nations belong to the common market, and because the bigger nations are in the common market, there will be a larger split between the bigger nations and the smaller nations that do not belong to the common market.

Up to now, also, it has not been deemed appropriate either to give the IEPG an institutional charter or to establish a permanent Secretariat, in order to preserve the most informal and pragmatic climate possible, keeping the organization as the natural place in which the European business or armaments is informally dealt with. This is what has happened in almost four years of life of the IEPG under the Italian chairmanship. Since January of this year, the Chair has passed to Norway, following the natural rotation in order to assure the maximum political commitment quoted many times as a dispensable base for any progress.

Also from this forum, I would like to express to the Norwegian chairmanship my best wishes.

To conclude, I already illustrated the European political and industrial picture which conditions the working of the IEPG. In the absence of extraordinary events, this picture goes on evolving slowly but firmly draws a more and more strict European coordination in the political and economical fields, as well as draws a greater and greater rationalization of the European industrial production. First of all, to rationalize means to act in a rational way and in the field we are dealing with, it means to make the best use of the available resources so as to avoid waste. It is a very difficult problem to solve, mainly by European countries who show such great economic-social-industrial differences and where there are different interests and capabilities. Nevertheless, mainly with respect to the higher prices of war materials and to actual world crises to rationalize the use of our resources is an imperative that nobody can disregard.

In this context, it is responsibility to help, to find an agreement on short-term national problems of common interests and to harmonize the military requirements for medium and long-term problems; to increase the associated forums around cooperative projects, which has already appeared in Europe; to the same, to manage the projects with a common method applying the criteria and procedures already being prepared by Panel Three. Such associative forms centered on nations with the more developed armament industry have already been utilized in the transatlantic dialogue where, in accordance with the pilot nation principle, they carry on talks with the North Americans on behalf of IEPG, about two weapon families well known -- anti-tank and air-to-surface missiles. This demonstrates that the IEPG is already recognizing the validity of this leadership for the solution of concrete cases of European interests. On the other hand, as to take into account that all national industries have to grow and flourish. Therefore it is necessary that the major countries associate the industrially-weakened nation with these projects in order to gradually reduce the technological differences. Also, it must be considered with care that the products so developed in the joint projects will not be significantly more expensive in terms of cost effectiveness in respect to those offered by the world market, U. S. in such a case, in order not to make impossible the so-called European preference for the minor countries.

I also deem it convenient and possible to increase the permanent formal industrial structure in specialized sectors, such as the air missile, in which the firms can find the right place and take part in various activities in proportion to the commitment of their governments. It is not a matter of creating multi-nation societies, but sectorial association carried on projects coordinated by their governments through the IEPG working group.

Finally, it is to be recalled that in accordance with the institutional charter of the IEPG, one of its aims is to strengthen European factors in its relationships with the U. S. and Canada. But every progress in the rationalization of European armaments substantially contributes to this aim, which we fully achieve when Europe will be able to speak with one voice.

Obviously, there is still a long way to go but at this stage, Europe deals with the transatlantic dialogue in a fairly satisfactory manner and it is interesting to note how, in the transatlantic dialogue, you are concerned with the same problems facing Europe in the collaboration within the countries with a more developed defense industry than the others. We have a kind of transatlantic dialogue in Europe, too. In fact, in light of my experience, rationalization, standardization and interoperability are similarly affected by the needs of national industrial bases by the problems or reciprocal balance in terms of monetary and technological interchange and maybe by the fear that an Ally,

as the result of technological exchanges, may become a valid competitor. Will such fears be overcome better and faster in Europe or in the transatlantic dialogue? Future years will tell. Thank you.

Doctor V. Garber

Thank you very much, General Moizo. I have one question for you. In the IEPG, when the IEPG tries to speak with one voice, they normally come to a solution, say on a project, and agree how it should be carried out. Then they turn to North America and at that stage, it is often too late to have a constructive, iterative dialogue early that could have determined that project would have been perhaps a little different if such a dialogue took place. Yet, because it is so difficult to speak with one voice, it is cast in concrete and IEPG goes along. How do you see the solution to that problem?

General Fabio Moizo

The IEPG machinery is too slow to cope with the problem of transatlantic collaboration on R&D. I would say we just found the solution, not one year ago. We had to open not easily a street away. The minor nations are not interested at all to have a pilot nation. But this has been accepted. So I think that the pilot nations or a group of nations that work as pilot nations has a way to go in certain fields, air-to-air missiles and so forth. They will go in this way and we prepare to get opportunities. I have to stress that this way has been found not easily at all. But it is a way open and, of course, is less responsibility to be aware of all the opportunities offered by transatlantic dialogue.

Doctor V. Garber

Thank you, General Moizo.

We will now take some questions. Doctor Fubini, could you tell us what are the most significant strengths of the Warsaw Pact, and also comment on Soviet chemical warfare capabilities and attitudes toward their use and NATO defenses against chemical warfare?

Doctor Eugene G. Fubini

Well, let us not only talk about chemical warfare. Actually, we in NATO make a clear distinction between tactical weapons and nuclear weapons, while the Soviets do not. So actually, the problem is not only chemical, but it is biological and radiation.

Their vehicles and their ships are equipped to fight in a chemical-biological-radiation environment. Ours are not and that, of course, creates a situation whereby our commanders are going to have a hard time deciding when and how to engage in that type of war. We in the United States have made a decision not to continue on offensive chemical weapons a long time ago. The Soviets chose not to follow us and that means we are, today, in the position of weakness in both chemical and biological weapons.

Now, I think that I can say with a certain degree of confidence that we have become aware of the importance of these two problems relatively recently and we are trying to take steps to offset these weaknesses. When I say "we" I am talking about the United States. But the reaction time, the cycle time in the United States is on the order of seven or eight years and that means we have, to quote General Moizo, a long way to go before we will be able to speak with a certain degree of confidence about both chemical and biological, separating out the radiation. But we have the same problem in terms of defense in that area as well. We are better off in terms of offense.

Doctor V. Garber

Next, one more question for Doctor Fubini. As you correctly pointed out, the U.S.S.R. is not monolithic but made up of many nationalities and is a Russian Empire. What is the Administration doing to capitalize on this issue in terms of leverage against the U.S.S.R., since they certainly have shown a sensitivity to it. I guess that is a political question, but maybe you want to tackle it.

Doctor Eugene G. Fubini

I have an easy answer. Fortunately for the United States, I am not a member of the Administration and I must admit that I think the question is proper and I would like to hear the answer to the question by somebody in the audience who is willing to answer it. I can't.

Doctor V. Garber

I think the political leaders who could answer that question are not present, but it's a good question. Maybe it will be looked at in view of the current situation in the world.

General Moizo, how do you view IEPG now in relation to the other supra-European organizations? Do you view it evolving a connection like you mentioned through the common market or how is it connected now?

General Fabio Moizo

Now the IEPC is connected to the European economic community and now the European parliaments. Those bodies are constantly looking for connection with us and, as I said before, we are resisting a little bit because it is difficult to go on, between us military-technical people, with all the problems that can arise by European congresses. So we are resisting. But we are subject and will be subject to their opinions. And because we are looking for political impetus in order to unify the organization of European weapons systems and production, we are asking for political impetus. At the same time, the political impetus shown not by the government we are looking for but by the parliament, can dump a little bit of our work.

Doctor V. Garber

Thank you.

Doctor Fubini, two comments you may want to comment on. First, all the inferior forces you gave as winners -- Alexander the Great, early Rome, Charlemagne, Napoleon -- were offensively oriented. Show me a defense force only, and I will show you a loser. The implication is that we are in a tight spot.

Doctor Eugene G. Fubini

I have an answer to that, if I may. Many years ago, I became interested in the problem of siege, the problem of besieging a city. And I went back as far back as my knowledge of history permitted, consulted a few reference books, and I found out that about 90 percent of the sieges succeeded. That was a somewhat surprising conclusion until I decided that the data were flawed. In other words, nobody starts a siege unless it has a good chance to win. And therefore, the statistics confirm only the value of the prediction or the offense. Let me say that many countries succeeded in defense and, if I may, I would like to remind you that Napoleon was finally defeated not only in Russia, but in Waterloo, and he was defeated at Waterloo by a coalition and if Bleucher had not come in on the battlefield to relieve the troops of Wellington, Napoleon would have won again. The trouble is, Napoleon thought that Grouchy was coming in and Grouchy was about 50 miles away and Bluecher was there. And that is the reason why the war was won. We have a case of a defensive posture of all of Europe against Napoleon which succeeded against a very apt offensive strategy.

Doctor V. Garber

Thank you.

A question for myself, wanting to know if I would comment on what has been done to relieve government regulations which stand in the way of industry. I mentioned there has been progress.

I think the most noteworthy initiative has been the reciprocal signing of memoranda of understanding with every NATO country now, except Greece, and that memorandum sets forth the policy that in a reciprocal way barriers will be brought down. In the United States, Colonel Carlburg, over here in the audience, is in charge of implementing these MOUs. We are trying to leave ample time for joint teams or European teams to come and bid on projects. We stand ready to discuss with our industry any impediments they may feel or unfair treatment they may feel so that we can discuss it with our colleagues in turn. We are bringing down many of the security barriers that stand in the way of teams, and where security barriers stand in the way of teaming, appropriate clearances can be submitted and essentially, the same rules apply as apply for requirements for U.S. cleared industry. In the area of technology transfer that stood in the way in the past, we intend to be very forthcoming in our evaluation of requests by U. S. industry for munitions licenses, where, on the other hand, of course, we tend to be more conservative with technology flow through the adversaries, as mentioned here today.

So all those things combined, I think, have generated considerable momentum and considerable dialogue that most of you have experienced. There are many things to overcome on both sides of the Atlantic, but the goal is as free as possible alliance market so that the best resources can be brought to bear on the common problems and then the Government would coordinate what they would fund in that picture. That's the long-term goal and I think we have made progress.

Doctor Fubini, your actions, your victorious smaller forces had single dynamic leadership with a goal of conquest. Is it possible to relate this to NATO structure? The implication is that your examples of victorious forces had single leadership and were basically not coalition forces, and is it therefore possible to relate those to the NATO situation?

Doctor Eugene G. Fubini

Well, I expect that it is very difficult to fight a war without having a correlated leadership. During the last world war, we did finally decide on a unified leadership. It was not a single country. It was a multi-country leadership and let me say that I spent a year in England working with an American

force, but I think during that year when I was not under military discipline, I went to talk to my friends of the RAF at least once a month. And we did have a unified leadership, although I must admit, our tactics were completely different. We flew during the day, they flew at night. The targets coordinated were different. I would say that you don't need to have a single leadership, but we need to have a unified leadership and I hope that's what we are trying to achieve during this meeting.

Doctor V. Garber

Thank you.

General Moizo, can you comment why after so many years STANAGS have not been more widely used in the interest of interoperability.

General Fabio Moizo

Well, some of the reasons have been mentioned. The national position - and for some nations, STANAGS has no legal validity. So in Italy, we run many problems. Sometimes those characteristics are just a company. And we have had troubles, say, because that company complies with the NATO requirement is such projects. This is the winning project. But the main reason is the national position, and many of STANAGS are demanding. Suppose I am developing an interim solution on weapon. I am not interested in having this weapon working from -50 centigrades to 100 centigrades. So in such a case, we depart. And sometimes the interim solution becomes a permanent solution.

Doctor V. Garber

Maybe I should see if there are any questions from the floor before I proceed with the rest of the written questions.

Q: Yes, I have one. My name is Bill Sullivan with EURO-TECH Associates and I have just prepared a three-minute preamble to my question which, with your permission, V, I would like to read. We are all trying to honestly and diligently come up with a solution as to why the NATO defense community is moving so slowly toward inevitable cooperation. I propose to you that it is partially because we are only looking at it from our own perspective. I mean, group perspective. I am convinced that we all want it to happen. The military has told us of the strides they are making in long-range consultive planning in defining future weapons system needs and at the soldier-to-soldier level in possible tactical scenarios. The politicians are all cooperating and will be more cooperative if we can more precisely

explain the problem. Government employees sincerely want to help and are mystified by the slow industry reaction. Industry leaders want to move toward more cooperation. So we come to meetings like this and hear the military tell us what they've already told us and so on with the politicians and government and industry leaders. We all look to these men and they have done their job and that is reassuring. But I submit to you that we are looking at the tip of the iceberg. Picture a pyramid with our military planners and politicians and bureaucrats on the top. The next level of the pyramid is the major weapons system manufacturers, perhaps 200 of them, working like hell on complex consortiums as they must. But where is the broad base of this pyramid that wants desperately, along with our leaders, to effect the needed change. I am beginning to get their perspective, but it is not being heard because we want reassurance from our leaders with their perspective. So we hear our leaders tell us again that they have done their job. Gentlemen, we need to hear the views of the huge base of the small suppliers, of second and third tier subcontractors. There are at least 10,000 of them within NATO. What are their problems? Without them, Boeing or Messerschmitt could not build an airplane, and a soldier wouldn't have a gun. Again, I submit that this room is full of subcontractors who want to cooperate but don't have the resources of the few primes, so they remain tied to their traditional customers. The F-16 program is a wonderful exception, where there is beginning to be dialogue at the second and third tier levels. I say that we can all benefit by broadening our customer base. Now, while I have the floor, I want to tell you about a practical way to initiate cooperation within this vital broad base to everyone's advantage. It is a part of Doctor Perry's triad. Artificial barriers have been removed and we can shorten lead times and costs by primes having a greater selection of potential subcontractors. Lead times, from some traditional sources, have gone from four months to eighteen months for some items, while other sources within this 10,000-company base are not being fully utilized. Primes are trying to develop additional sources. We've got to learn to cooperate and compete where it is advantageous at lower levels in the pyramid. We've got the procedures laid out for us by Dale Church's group for broader cross-Atlantic competition. So how does it happen? About six months ago I gathered together some U. S. aerospace specialists with the view to providing support to medium-sized NATO country companies to point up opportunities, assist in marketing, at the level where it happens with the buyer and engineer. Assistant proposal compliance -- that may mean no sleep for a few nights writing to meet a deadline. That's what we do here. With 45 days from RFP release to proposal due, management traditionally takes 30 days and a bid decision. We can help them in teaming and sharing R&D and in negotiation and liaison through the R&D or production contracts. We've mailed data on the problem and solution from our perspective to about 50 European companies with little response. We plan a trip to provide details on our services and determine what companies --

Doctor V. Garber

Please, let me interrupt. I really take your point at the beginning. I think that it was a very constructive point and I agree with it, but in the interest of time and because now you are getting into an effort that, no matter how laudable it is, is an effort by one organization.

Q: I see. I'd like to close then by quoting a comment from a recent Army publication. Pogo says, "Our problem is insurmountable opportunities." Thank you.

Doctor V. Garber

Let me go through the rest of the questions here. One of the speakers -- this is for both Doctor Fubini and General Moizo -- said that defense cooperation within NATO can succeed by means of a treaty and probably only a treaty, and not through MOUs, etc. Congressman Daniel alluded to that, Ellen Frost's paper. Do you agree and if not, what do you advocate?

Doctor Eugene G. Fubini

Well, apparently a previous speaker said that and in this country, everyone is free to disagree with everyone else within limits, and I tend to firmly, strongly, hard disagree with the statement. I think the person who made the statement doesn't know what's going on.

Doctor V. Garber

General Moizo, would you want to comment on the feasibility of a treaty to solve our problems versus the initiatives that are underway?

General Fabio Moizo

Well, I will only say this. When you get married you just sign a treaty with your wife. But the treaty must go along day by day, so I don't think a treaty will solve anything. The treaty can be signed at the end of the marriage, so if they put on a paper the rules, it would prove to be worthy to follow it. We have to follow a pragmatic way, follow a little bit in IEPG. Look for an opportunity, for instance, a pilot nation, and then open the role of the pilot nation, and so on. So I don't think anybody would sign a treaty. All so general terms that it means nothing. But the treaty is going deep and deeper in the organization because there are so many interests that it never will be signed.

Doctor V. Garber

One more question for myself to comment on the current U.S. policy regulations on offset. Well, we currently continue to have a policy of not subscribing to government offsets. We believe that the balance, the equitable balance, should arise on its own merits with participation in an early stage and ability to participate. However, we do not propose industry-to-industry offsets. Those, indeed, can sometimes stimulate involvement of the subcontractors that have been mentioned and various vendors. So I don't foresee us changing that policy for the time being.

Doctor Fubini, is it possible and are plans underway to establish joint programs for CQ, and then comment particularly on an intelligence cooperation. Is that an impossibility?

Doctor Eugene G. Fubini

To the best of my knowledge, there have been a number of discussions to establish interoperable CQs rather than common CQs. Some common CQ is in the works. In intelligence, there are some problems. We should talk about the collection and the analysis, but the problems decrease in size very much as you begin to talk about cooperation in the product. To the best of my knowledge, this is one area where a lot of progress has been made in recent years.

Doctor V. Garber

Thank you. I would like now to propose that we have a coffee break so that we can come back a little early and have more questions and answers left for our next two speakers.

Our next speaker is the Honorable Lucy Benson. Before joining the Administration, Mrs. Benson was a Trustee of the Brookings Institution and the Alfred P. Sloan Foundation and was a Director of several corporations. As Under Secretary of State, she was instrumental in shaping policy and technology, both cooperative and the worry on the United States of where technology transfer should be controlled. She was involved in the Arms Transfer Policy issues and many related issues that are of interest to you today. Therefore, I am particularly pleased to be able to introduce her today. She has left her position recently, but is still on the Government roster. She is a consultant to the Secretary of State. The Honorable Lucy Benson.

Lucy Wilson Benson

Thank you very much, Doctor Garber. I am especially pleased to be here again this year before the American Defense Preparedness Association because I am now a private citizen and I appreciate the fact that your officers wished to have me come before you even in that capacity. But of course, I am not really just a private citizen, although the implications of the next closest thing, which is a semi-private citizen, leave something to be desired.

Unlike Cincinnatus, however, I have not returned to my plow, nor will I, like McArthur's old soldier, just fade away. In fact, as Vic just said, I left my responsibilities as Under Secretary of State just a few weeks ago. My memory of my three years in Government is already highly selective. I remember the good parts and the less good are already fading from view. One of the good parts has unquestionably been my association with ADPA and its members, so I am particularly glad to be back.

Another good aspect of my time in office was the opportunity to deal with the question of arms cooperation among the NATO Allies. While we have not solved all the problems, we have been making a good deal of success in several areas: industrial collaboration, cooperative development and production, third country sales - even third country sales. Much of this is due to the hard work of Bill Perry and his associates in the Department of Defense, who applied some badly needed new vigor and especially, new ideas to the effort. Above all, we were spurred on by the conviction that there are few elements of our relations with our Allies which are more important, as we look to the challenge ahead, perhaps not so far ahead, incidentally, as we were tempted to think just a few months ago.

Let me say at the outset that those of you who came here this morning to hear me address the abstract sounding subject of "The Scientific and Technological Considerations in Foreign Policy," as it's printed in the program before you, are doomed to disappointment. The headlines of today and of recent weeks, along with the temptation to look back inside now that I'm on the outside, lead me to talk, instead, about a slightly different perspective on our foreign policy and that is the relation of arms cooperation in NATO to our mutual broader security goals. It is perhaps fortunate that we do so in the context of recent developments in the world, for one strong impression I have of the discussions of arms cooperation among NATO Allies is that they become very far removed, indeed, from the fundamental considerations which call for that cooperation. That is not to say that considerations of the impact of production decisions on local economies or the need for sensible business decisions or the pressures on governments to procure from local sources and so on, are unimportant. On the contrary, they are, each on their own

merits, quite defensible. The point is, however, that they are essentially micro as opposed to macro factors and they tend to obscure the larger picture. They carry with them the risk that we all will end up seeing the trees and missing the forest, forgetting the plain fact that we need urgently to improve our entire defense capability. Even real increases in defense spending, which are necessary, can no longer substitute for more effective and efficient use of resources. Events such as those in Afghanistan have, among their many sobering affects, the ability to reawaken our appreciation of what arms cooperation is really all about, of what NATO itself is about, and of what the ultimate alternative to cooperation is. They remind us, in short, that what is at risk is our own survival. Each of the principal elements which go to make up the complex of relationships, which is NATO, the political will, the attachment to similar, if not always the same, ideals and individual freedoms, the belief in diverse economic systems, has more meaning in life when it is related to the shared burdens of assuring security, our overriding necessity. And conversely, the lesser considerations, or perhaps more accurately, the considerations of detail, which are part of each of those elements, mean little in isolation.

An American president, probably not one who will be remembered 2,000 years from now, once said "The business of America is business." That may or may not be true, but the business of NATO is unquestionably the survival of the free world. And the historical allusion is both illustrative and directly pertinent to that which sometimes misleads us about just what the real objective of arms cooperation is, or ought to be. We should make no mistake about that. The real pay-off in greater transatlantic arms development and production cooperation is greater security for all of us.

So when we suggest, as we do, that U. S. producers accustom themselves to a lesser share of the transatlantic trade in weapons and related equipment and services, it is for the purpose of ensuring that the system itself survives. In like manner, when we suggest, as we do, that our European partners accustom themselves to using the best available technology, regardless of who produces it, it is for the same reason.

Those of you in industry are accustomed to the need from time to time to re-tool to prepare for future growth. You are accustomed, also, to the need from time to time to minimize short-term profit by plowing investment back into capital improvements to support greater and more up-to-date production. We seek nothing less nor anything radically different in its philosophical basis with regard to arms cooperation in NATO. To succeed, however, will require a change in the recent ten-to-one balance of arms trade in the U. S. favor. That redressment, at least to the degree it cannot be accounted for by growth in the market, must

come by sharing in research and development as well as in production, procurement and marketing. It will mean a lesser share for U. S. industry. It will mean more cooperation, both of which will be hard. In short, it will require much more effort than we have made to date.

The vital consideration, it seems to me, is to keep our attention on the purpose. That is at least part of the lesson of recent events and it is one for which, should it be forgotten, the next reminder may not be so distant.

Within the NATO context, the practical translation of the concept of arms cooperation is, of course, RSI. On that point, I'd like to try once again to lay to rest the persistent notion that there is some sort of conflict or inconsistency between our policy of support for arms cooperation and our efforts to manage more rationally and sometimes to reduce our exports of conventional arms to other nations. There is no such conflict. And I believe that I can attest to that with the authority of one who was the chief custodian of our arms export restraint policy. It is, in fact, silly to conclude anything else. What is true is that the policies are related and must be made to coincide in a sensible way, keeping in mind the objective of each, which was strengthening the overall goal of security.

It is either uninformed or mischievous to suggest that we cannot have both arms cooperation in NATO and a workable, global arms export policy. Perhaps more accurately, it suggests that it may be beyond the imagination and intelligence of government officials to accomplish both ends. Now, I don't know what has happened since I left the Government, but I doubt that it has come to that. Rather, I think, the notion of inconsistency between the two policies represents obstructionism on the part of those who have become too attached to a single objective. The task of those who believe in both and believe that progress toward both is possible, is really quite straightforward. Pragmatism and flexibility are needed, rather than zealotry and a pseudotheological belief that one policy must be a slave to the other. Both cooperation and restraint are essential to our perception of the security needs of the West. Whether one or the other consideration is to be paramount in our relations with another nation or group of nations depends, of course, on the degree to which those relations are based on a shared perception of potential threats and where the protection of another nation is ultimately important to our own security.

So it follows that with NATO the goal is cooperation rather than restraint, a goal which the President endorsed by specifically excluding our NATO Allies from his 1977 declaration of the Arms Export Restraint Policy. In fact, there are only two of the Arms Export controls, co-production and third country sales, which appear to be obstacles to Arms Cooperation in NATO and I'd like to touch on each of them briefly.

The first obstacle to facilitating co-production is our requirement, the United States' requirement, that co-production arrangements with other nations must undergo a cumbersome individual and detailed review process. This is manageable, as we have seen from experience during the past several years. Despite the restriction in our policy on co-production, no co-production proposal with a NATO partner, at least to my knowledge, has been disapproved within the context of the President's Arms Export Restraint Policy. While I would not want to underestimate either the importance of the various non-economic factors involved in co-production or the difficulty of governments and industries cooperating, I do want to emphasize that the benefits, especially when considered in the overall context with which I began my remarks today, clearly outweigh the debits. Co-production requires that we first decide on the systems to be developed and produced in Europe and America, respectively. We cut at least the first piece of the pie, so to speak, concentrating R&D money in specific and potentially high pay-off areas for RSI. We've begun a useful division of labor of this sort. And I want to emphasize that I believe it has the potential for balancing the competing political, economic, labor and industry pressures all NATO countries must take into account. That, alone, is no mean feat. I think it's worth stressing the fact that the potential for progress in co-production is not theoretical. In the past year, a number of concrete steps have been taken. Dual production of the ROLAND surface-to-air missile, the Belgian armored machine gun, the M-113 armored personnel carrier have begun. Plans continue for dual production of the Stinger and A-9L missiles. The United States is actively and seriously considering European systems, such as the British 81 mm. mortar, 10-ton truck and a bridge erection boat, the Norwegian Penguin anti-ship missile, the German distal air control system and the French Atlas system.

The second element in our global Arms Export Policy which bears on NATO arms cooperation is our restriction on sales to third countries of defense items containing U. S. produced or U. S. owned technology. And I might just say I have spent an inordinate amount of time on this problem in the past three years. You're all familiar with the general problem. In simple terms, it arises because we are required by law and policy to control sales of such items to third countries as though we were making the sales directly ourselves. Such sales are likely to be, and to continue to be, to put it mildly, the subject of differing views between us and our NATO Allies. Because whatever else we share, we do not always share the same attitudes toward other countries when it comes to arms sales.

There are two points I'd like to discuss with respect to third country sales and I will do so with perhaps a little more bluntness than you may be accustomed to hearing from a government official because frankly, it seems to me that in the context of

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and 147.

what is at stake, third country sales have become an obstacle on both sides of the Atlantic, all out of proportion to its real significance.

My first point has to do primarily with our European Allies. We are frequently told, when specific co-production proposals are discussed, that nothing can be done as long as the U. S. maintains its third country sales restrictions, that they are an intractable stumbling block because third country sales are essential to the European producers; presumably the case being made is that a production run, to be economically feasible must provide a market larger than that of NATO, plus Australia, New Zealand, Japan and several other countries. In fact, that market totals at least 15 countries and it is probably closer to 25. But where is the market analysis? Where are the data to establish the dividing line between preference and necessity? To what extent do such contentions represent the preference of the European producer that his return be maximized a perfectly normal preference, and to what extent the necessity of some third country sales to achieve reasonable return on investment? We know much of each other within NATO. We and our Allies understand fairly well each others motivations, the political, economic, parliamentary or congressional pressures which must be taken into account. But what do we know independently of the economic analyses upon which the dire predictions we frequently hear about arms cooperation are based? And I wonder if the point is always and exclusively economic, as presented, or whether, instead, it represents nationalistic sensitivity in another guise. I hasten to say that I do not mean to point the finger only at our European friends. We are very good at playing that same game.

Of course, all of us would prefer to be able to act with as much freedom as possible, but it is axiomatic that with freedom goes responsibility. I think in this case that responsibility includes more rigorous analysis of the genuine economic factors which are doubtless present. And perhaps more frank discussion of the other non-economic factors which bear on the problem. Certainly, within our system, which requires Congressional approval of any changes in present practice on third country sales, such a frank analytical approach may become a necessity rather than a luxury.

And this brings me to my second point. And that, in turn, has to do with U. S. policy. And with the role of Congress in enunciating that policy. Restrictions on third country sales while included in the President's Arms Restraint Policy, originated with Congress many years ago. Present law continues the restriction. I believe that we must seek changes in our law which would ease, in both spirit and intent, the manner in which we go about arms cooperation. I do not suggest abandoning one approach and substituting another. Only that there be a rational and policy

directed examination of what might be done by means of legislative change to facilitate responsible arms cooperation within NATO, while maintaining third country sales restrictions against possible abuse.

I want to emphasize that I have not developed specific proposals nor legislative language, nor do I have a specific time table in mind, although I do not think it is far fetched to suppose that the Congress could act in this area this year, if industry and Government got their acts together. It would seem to me that we would consider proposals which involved shifting the emphasis in the following ways.

We should encourage the U. S. Government to move away from a case-by-case review of each and every request for transfers by NATO Allies. Instead, we should move to a system-by-system review. In fact, the family of weapons concept is a promising first step in this direction. We should encourage the NATO governments to agree ahead of time on the countries to which certain systems and technologies could be exported, where they can be manufactured and who may be allowed to use the technical data.

We should support those efforts now underway to find a manner of controlling better those defense exports which contain sensitive technology, somewhere between the screws and the bolts which hold a system together, and the sensitive advanced electronics which tell it how to operate. To use a general illustration, we ought to be able to find a meaningful technology threshold that supports the policy goals of the Alliance. We should seek, where necessary, legislative authority to allow for more United States purchases from the Allies when it would further the common defense and the interests of the Alliance.

These are, needless to say, illustrative rather than comprehensive. The point is, we must soon address the third country sales problem forthrightly with a mind set to stop moaning and groaning about it and get on with removing the problem.

But finally, let us remember that the main point in NATO arms cooperation is not third country sales. Let us keep it in perspective. Even with no third country sales, co-production and co-development in NATO is well worth doing. We should be looking first to improving NATO's and the free world's defenses, and second at sales outside NATO. For, if conflict comes, and if the tide of battle is affected by our forces' inability to communicate over the same radios or their aircrafts' inability to operate jointly, or their armors' inability to share ammunition and spares, we will find little comfort in the commercial or political or psychological successes one or another of us in NATO may have had in this complex struggle over arms cooperation.

I don't want to end on a note of gloom and doom. It reminds me about the old story of the Emperor Franz Joseph of the

Austro-Hungarian Empire who was moaning and groaning over his problems and he was talking to his Foreign Minister and he said, "I don't know whether it's hopeless or serious," and the Foreign Minister said, "It's serious, but not hopeless."

NATO arms cooperation is possible. There is absolutely no question in my mind that it is possible. I think that we have gotten ourselves hung up, we and our European Allies, on theological discussions instead of attacking the whole problem on a step-by-step basis. We have an enormous penchant, I know we do and I didn't realize the Europeans were as bad, for trying to create grand theoretical structures into which everything fits neatly. Nothing is going to fit neatly in this business. I think we should take it step by step, first try one thing and then another thing and then another thing and build over a period of time a whole system by which we may cooperate. There is no question in my mind whatsoever that if we do not cooperate our progeny and their progeny are going to regret it.

And so I urge you to do what you can, as members of industry, the military, other government officials, our counterparts and Allies from Europe, I urge you all to get your act together. Thank you.

Doctor V. Garber

We appreciate your candid remarks, Lucy, and look forward to a live question and answer period. Thank you very much.

I would like to next introduce the Under Secretary of Defense, Bill Perry, my boss and mentor. I don't think he needs any further introduction to this group dealing with cooperation in armaments. Bill.

William J. Perry

I had a different talk prepared for this group than the one which I actually am going to give today. I began to change my talk on Christmas. It was Christmas Eve, as you know, when the Soviet Union began moving combat troops into Afghanistan. Within a few weeks after that date, they had moved in four motorized rifle divisions and one air mobile division - in all, more than 80,000 troops.

The Soviet Union announced to the world that they had moved these troops in at the request of the Afghanistan government. To the extent that story had any credibility at all, it was shattered two days later when the Soviets assassinated the man they claimed had invited them. Even countries that in the past have found it

possible to apologize for every other action of the Soviet Union, rose in condemnation of this action. In the United States, we see this as a move threatening the oil fields which fuel the western world's industry and economy. President Carter declared that this was the most serious threat to the peace since World War II. He responded by putting an embargo on grain, by suspending the sale of high technology equipment, and by initiating a boycott of the Olympics. In his State of the Union address last week, the President declared that the Persian Gulf was vital to the national security interests of the United States and that we would meet any threat to that area by whatever action was necessary, including military action. Make no mistake, he has drawn a line. And the Soviet Union should make no mistake; this is not just a statement of the President; the Congress and the people of the United States solidly support him in that statement.

The question which I will address is the extent to which the threat of military action will provide a sufficient deterrence to any further aggressive moves which the Soviet Union might make in the direction of those oil fields. The answer depends on two separate factors: first, our military capability to respond if need be, and second, the position of our Allies. On that second point - our Allies' position - I don't know the full answer yet and I think it will be several months before the answer becomes clear. It appears to me now that our Allies regard the Soviet move as an isolated event and therefore do not regard it to be as serious a threat as do we. Yet if it really is a move toward the oil fields in the Persian Gulf, it is clear that the threat to Western Europe is even more direct, more immediate, than the threat to the United States.

I can address with more confidence the other factor - our capability to deal with an emergency if one does arise in the Persian Gulf.

There are several significant facts which bear on this situation. First, the nations in that area are predominantly Moslem. Some of them, indeed, are still in the throes of, or are just emerging from a state of revolution. While they have every reason to fear the Soviet Union, they bear no love for the United States. Secondly, the area has a common border with the Soviet Union and, therefore, provides easy access for their ground forces, whereas it is 7,000 miles from the United States. With our smaller ground forces to begin with, we have the further disadvantage of having no ground bases, no air bases, no naval bases, and an inadequate airlift to deal with contingencies that might arise there. These factors all limit the actions we can take in the Persian Gulf. On the other hand, we have today, I believe, significantly superior tactical air power, significantly superior sea power, and an unambiguously strong nuclear deterrence. Even those three areas of advantage, however, are being challenged by the momentum of the Soviet weapon development and

acquisition program. If current trends continue, our nuclear deterrence will be challenged by the early eighties; our tactical air superiority will be challenged by the mid-eighties; and our naval superiority will be challenged by the late eighties.

This is a rather simplified balance sheet of assets and liabilities. And the question is, "What actions can we take to enhance our assets and to minimize our liabilities?"

Any diplomatic actions start from the observation that what we see as a threat to our oil supply, the Moslem countries must surely see as a threat to their own independence. Therefore, we can encourage them to work together to protect their independence and to cooperate with the United States wherever mutual interests exist. The Islamabad Conference which just concluded in Pakistan was the first encouraging move in that direction by the countries that are most directly involved.

I have already listed a number of political actions being taken to underscore the seriousness with which we view this situation and to demonstrate to the Soviets that they cannot take this sort of action without suffering severe consequences. I now want to highlight an action in which I have special interest; that is the suspension of sales of high technology goods to the Soviet Union. I support that action, and intend to support for the indefinite future a considerable tightening of export controls in critical technology, especially in the areas of computers and microelectronics. I see those sales as being in the aggregate a very small benefit to the Western World, but a very great benefit to the Soviet Union -- both directly and indirectly assisting their military objectives. It is quite clear that for us to be successful in this action we require the full support of our Allies. It is not possible for the United States alone to restrict effectively the flow of computers and microelectronics to the Soviet Union. We require the support of our Allies for this action, and we will ask for their support.

These actions, while they are significant, are still subsidiary to actions which strengthen our military capability. We must meet the military challenge that has been posed to us by the Soviet Union, and in order to do that, we must first acknowledge the nature of that challenge. In particular, we must acknowledge the imbalance caused by the Soviet Union's spending on military equipment in the last decade.

There are many different ways of expressing this imbalance and all of you have been bombarded with statistics. I want to give you just one number which I think best describes the magnitude of the problem we are facing. During the last decade -- the decade of the seventies -- the Soviet Union spent on military equipment \$240 billion dollars more than the United States -- \$240 billion dollars! That amount of money would buy the complete

MX system; the complete TRIDENT fleet (missiles and submarines); a thousand F-16's, a thousand F-18's, 10,000 XM-1 tanks, 50 nuclear attack submarines, and two complete carrier task groups. That list dramatizes the magnitude of the disparity in spending for military equipment in the last decade.

The question, then, is how to meet this challenge in the face of that enormous disparity. In an earlier day, and facing an earlier challenge, Winston Churchill said, "You cannot ask us to take sides against arithmetic." Put another way, to face this challenge, we must first recognize the disparity, recognize that we cannot argue it away; that we cannot take sides against arithmetic - we have to change the arithmetic! Some people, instead of working to effect the needed change, would prefer to debate whose fault it was; to ask how we got into this arithmetic fix. This is a presidential election year in the United States and there will be fingers pointed back and forth as to the party or the administration to be held responsible. I think it is worth examining the facts. The decline in American defense spending in real dollars began in the last year of the Johnson Administration. The defense budget of the United States - in real dollars - declined every year of the Nixon Administration, every year but one of the Ford Administration. In the Carter Administration, we declared a goal of 3 percent real growth, but only achieved authorization for that much growth this past year.

The fact is, the problem I am describing was not the consequence of the policy of any one Administration, or any one Party, but reflected - and on the whole, reflected accurately - the view of the people of the United States that we really did not have a grave threat to our national security and therefore did not require increases in defense spending. And the question now is: has that basic underlying judgement changed any?

As tragic as the Afghanistan invasion is, history may record that the Soviets did us a great favor by waking us up. That action, as a last in a series of actions by the Soviet Union, has shocked the United States public, has forced them to face this military challenge -- and it has caused a new awareness and a popular support for defense preparedness, creating the environment which I believe will allow the Congress and the Administration to take necessary actions.

If, indeed, that assessment is correct, we must ask about the priority actions that we should be taking to deal with this problem. It is, to be sure, a near-term problem but more importantly it is also a problem which is going to be with us for years. The competition for oil, and the tensions created in the Persian Gulf area, will be facts of life for the rest of this century. So we need to be taking actions which are good for the long term, not just spasmodic responses to the particular crisis we see today.

First, and foremost among those actions, is that we in the United States must maintain an unambiguous nuclear deterrent. A period of international turmoil, a period in which conventional forces may be confronting each other, is not a time when there should be any doubts in the world about the strength of our nuclear forces. We have four major programs underway to maintain our strategic power. The TRIDENT program is building the strength of our nuclear submarine forces and increasing its survivability; the cruise missile program will maintain the survivability and increase the strength of our bomber forces; the MX program will correct the growing vulnerability of our land-based ICBM forces; and the new theater nuclear missiles will offset the Soviet SS-20 deployment. Last December NATO agreed to strengthen theater nuclear forces by the addition of the ground-launched cruise missile and the Pershing II ballistic missile, both of which will be operational in Europe in 1983. New programs are also in R&D; but if we maintain a steady course on these four nuclear programs already underway, they will provide for our nuclear deterrence for the rest of this century.

But our strategic nuclear capability, as important as it is, will not deal with the day-to-day threat of conventional forces in the Persian Gulf. Nor will it deal with the requirement to strengthen our conventional forces in NATO. Let me list some actions which I think we must take to deal with those problems.

We must improve our airlift capability in three respects; first, we need to double our capacity; secondly, in the course of doubling this capacity we will put a heavy emphasis on outsize cargo capability so that we can carry tanks, armored personnel carriers and other mechanized equipment; and third, this new airlift capability must have the flexibility to operate at small, austere airfields. We believe that is true whether we're dealing with a Persian Gulf contingency, or the threat of war in NATO. For that reason, we will be proceeding this year with a program which we call C-X. In my judgement, the C-X airplane will be somewhat heavier and certainly wider than the C-141, but smaller than the C-5. It will not require the application of advanced technology, so we should be able to use commercial acquisition practices allowing us to achieve an operational capability by 1985.

Even with this increased airlift, we will have to increase the practice of prepositioning heavy equipment in areas of the world where we think it might be needed. In an emergency, then we will only have to move troops into an area where they will join their tanks and armored personnel carriers already present. The prepositioning program has been underway for several years in NATO and we have several divisions of armored equipment stored at various warehouses and storage depots in Europe. That program will be continued and enhanced as far as NATO is concerned, but we need something like that in the Persian Gulf area, too. The

problem is that we don't have real estate, depots, and warehouses in that area. So we will be developing a shipborne prepositioning capability. We will be getting large cargo ships, outfitting them with armored mechanized equipment and positioning them near the Persian Gulf. In an emergency we could move that equipment in a matter of a few days to the crisis area to join with personnel who will be flown in.

Another imperative is that we maintain our tactical air superiority. That will not be easy. The Soviets are conducting what we call a "full court press" in tactical air. They're producing substantially more tactical airplanes than we but, even more significantly, they are beginning to catch up in technology. They now have under test a very advanced look-down, shoot-down radar and missile which I expect to see deployed in a year or two. When that system becomes operational, it will remove the sanctuary which the NATO aircraft now have; namely, being able to avoid Soviet airplanes by flying low. And that will affect the balance substantially. We will not have a simple task of maintaining tactical air superiority in the future. We will have to work at it.

In the United States we will take three actions of primary importance. We will "pour on the coals" on the F-16 program; we will "pour on the coals" on the F-18 program - producing those two fighters as fast as we can; and we will expedite the development of the AMRAAM, the new advanced medium range air-to-air missile. The AMRAAM is, of course, a key program in our NATO family of weapons. We believe that the enhanced Soviet threat adds further argument for proceeding on the family of weapons but we will be bringing to that family of weapons negotiations a greater sense of urgency. We will be asking the European side of the negotiation to accelerate the date by which their portion of the family of weapons (ASRAAM) will be brought into operation.

We also need to maintain our naval superiority. I believe that the U. S. Navy significantly outclasses the Soviet Navy, but in some engagements our Navy will face a serious additional threat from Soviet land-based air. Therefore, we will place a great emphasis on strengthening the anti-air capability of our naval forces with particular emphasis on defense against BACKFIRE, including an offensive capability against BACKFIRE - namely, attacking their bases. We will also extend the lead we already have in anti-submarine warfare, with a particular emphasis on the continued development of towed-arrays and sophisticated processing equipment, so that our submarines will always detect the Soviet submarines before they themselves are detected.

Finally, we are placing substantially increased efforts in enhancing the anti-armor capability of our forces. Our technology today permits us to produce anti-tank systems which will be day/night capable, all-weather capable, and which will have a fire-and-forget capability. These systems will allow an individual foot

soldier to defeat a tank and they will allow our current air-craft and missiles to defeat a whole column of tanks. These are not fantasies or technologies of the future. The technologies exist today and they have been demonstrated. What is required is the management momentum to drive them into production and out to our forces.

I would like to close with a comment which deals more with the philosophy than the substance of our defense. While we need and will continue to need constructive criticism, we should stop badmouthing ourselves. We are destroying our image in the world; we are raising questions in the world about our ability and our will to defend ourselves; and perhaps worst of all, we are raising doubts in our own minds about our capability. We, in the United States, Western Europe and Japan are still years ahead of the Soviet Union in the technologies which are key to a superior defense capability - computers, microelectronics, composite materials and jet engines. We still have the greatest spirit, the greatest energy of any people on earth because we are a free people. The Soviet Union has achieved, to be sure, a tactical success in Afghanistan. I believe history will record it as a strategic blunder. For the sleeping giant has awakened for the first time in a decade.

I believe that the Western World -- awake and united -- can meet any challenge.

Thank you.

Doctor V. Garber

Thank you, Bill. I think the applause speaks for itself, as far as the sentiments of the audience.

The first question is to you, Bill. You seem to regard the invasion of Afghanistan in the same light as the attack on Pearl Harbor. The question is if the USSR withdraws in 30 days, as the President has requested, will that bring us back to business as usual? And "let's all go to the summer Olympics."

William J. Perry

No.

Doctor V. Garber

Lucy, in December of 1978 at the ADPA meeting, you said that this Administration could not continue to put unilateral constraints

on arms sales if our Allies continue to market to countries where we have imposed limits. Does this remain true and do you see changes in that policy, or rather in implementing that policy.

Lucy Wilson Benson

When you get right down to it, there really has not been a change in implementing the policy because there has been no need to change the implementation of the policy. It is true that I said what I am quoted as having said. I've said it many times in the certain knowledge ahead of time that the idea of multilateral cooperation arms restraint was a non-starter. I will say, now that I am out of the Government, that it was certainly never my idea. And I knew it wouldn't work, it hasn't worked and as far as I'm concerned, it's totally irrelevant. Now, the President might disagree with that, but that is my judgement. As for implementing the arms restraint policy, it's been implemented with great care. I trust it will continue to be implemented with great care and with a lot of sound common sense and with the number one eye on our national security. I believe we should export arms where it is in our interest to export arms, but not where it isn't. I think the great benefit of the arms restraint policy was not so much the fact that we did reduce arms exports. That's really rather easy to do. But that we got into a system where we know why we are exporting arms, to whom, when and for what purpose. That, I think, is important. If we're going to export arms, not just for the sake of exporting arms but because it's of interest to us and our national security to do so, we should have a plan, we should have an idea of what we're doing, not just do it willy-nilly. That the policy has achieved and I think it's its greatest achievement.

Doctor V. Garber

Thank you, Lucy. A related question to you. Is not Allied armaments cooperation, as we have heard in this conference, of significant importance that arms control should be something we do with our Allies instead of to them?

Lucy Wilson Benson

I'm not sure I understand the question.

Doctor V. Garber

The idea, I guess, is that we, for reasons you mentioned, unilaterally do what is in our national interest. And yet, if it is in a cooperative program, it's a multilateral interest

program, is it fair, then to have unilateral criteria?

Lucy Wilson Benson

Well, I think you know this is one of those things that you're never going to reach perfection. I think we should do more multilateral planning with our Allies. It's difficult to do. None of us, neither we nor the British nor the French nor the Germans have ever cooperated in this area. It's very hard to do. I think it's a part of NATO arms cooperation, however, to also cooperate on the problem of exporting arms to other countries. Actually, it's not the problem that everybody makes it out to be, either in the need that is seen by many for total freedom or in the fact that we have tried to control so much. There have been relatively few examples where the United States has objected to arms sales by our Allies to other countries, relatively few and my guess is that with Afghanistan and the sudden reawakening, as Bill put it so well, as to what the real threat to our security is, that I think interest in third country sales is probably going to diminish, anyway. So I think it has been more of a theological problem than it has been an actual problem. I agree with the spirit behind the question that if we're going to control exporting arms to a country or group of nations, we ought to do this with a considerable amount of planning ahead of time and not just drop the shoe, as it were. I hope that we will improve in that.

Doctor V. Garber

Thank you. Bill, does the Department of Defense budget process ensure that adequate visibility is given to RSI implications before approval to proceed with weapons systems development? If not, what is needed in the future.

William J. Perry

Yes. That's a red herring. That issue gets considered, reconsidered, re-reconsidered by myself, by Bob Komer, by the Secretary of Defense. There's no problem. The actions we take on it may be something different, but it gets considered. Let there be no doubt on that.

Doctor V. Garber

Thank you. Lucy, do you see changes in U. S. policy in selling more sophisticated weapons systems to Latin America and how likely is it that the FX-type export aircraft will be sold in that region?

Lucy Wilson Benson

I think in time there will be a change in our arms policies toward Latin America, but it will probably be much slower than the change which is already underway in a sort of massive fashion in our policy towards arms exports to Southwest Asia. I think it will change when it becomes apparent to this Administration or the next Administration, regardless of which Administration it may be, that it is necessary. We do have certain problems with some Latin American countries which you've all heard about ad nauseum, concerning human rights. I hope that as time moves on this will become a more realistic policy than it has sometimes been in the past three years, though that's improved greatly. You may not be aware of it, but it has improved greatly. I think the United States has always had, at least in this century, a restrictive policy toward arms exports to Latin America. Not new with this Administration. The restrictions, some of which have been incorporated into the President's Arms Restraints Policy, were there long before this Administration took office. So it's not just a question of changing the current policy. It's a question of changing long practice and I think there are changes that are needed in this long practice. I'm not certain just how high the technology is that is needed. My own feeling is that if there is a need which is related to our national security for high technology military equipment to Latin American countries, it should be exported. If there's not a need, it shouldn't be.

Doctor V. Garber

Thank you. Here's one for you, Bill. Business Week Magazine said this week that U. S. aerospace industry will have a difficult time in increasing production in defense items because of a lot of shortages of manpower, critical materials and very long lead times. First, do you agree with this assessment and secondly, if you do agree, could this lead to increased co-production with NATO countries, including countries like Australia, Japan and Israel and Egypt?

William J. Perry

All of the evidence that I have supports the contention in Business Week that there will be shortages of parts, shortages of manpower, stretchings of delivery, increasing of prices. That problem is not unique to the United States. It reflects the tremendous surge in commercial orders which is being felt in Europe as well as the United States. My observation is that that problem exists in the United States, in Europe and in Japan. While all of you have heard me present many good arguments for co-production, I don't think that's one of the arguments for it because the problem is across the board.

Doctor V. Garber

Lucy, I would appreciate your comment on the proposition that offsets, when mandated by governments as a condition for major purchases, may involve technology transfer at less than market prices, disturbing trade and investment and jeopardizing future U. S. competitiveness. Could you comment on that? First of all, we don't have such a policy, but the question is if there was a government mandated offset, I guess, what do you think of that and how would it affect transfer technology as a forcing function?

Lucy Wilson Benson

I'm confused by the question, since we don't have that condition. I don't think we ought to jeopardize future U. S. competitiveness, obviously, so if it's going to have that affect we shouldn't do it, except that I think we have to recognize that in the area of NATO arms cooperation, both sides of the Atlantic have got to give some on our past practices and present practices. There's no way we can make the two-way street idea, which we've talked about for 30 years, work unless we figure out ways, which Bill has made a lot of progress on, in which to have the best technology, which we happen to have, transferred in weapons systems and support systems to the Europeans, and vice versa. His ideas, which he's been working on for the last several years, are really extraordinary. I think we can move ahead with them. I think we can maintain our competitive edge wherever we go. I think we have to remember that these things are a matter of a little here and a little there, minus there, as far as profits are concerned. We've got to have a

Doctor V. Garber

Thank you. I'd like to see some related questions seen. I'm not aware of any technology of them go on industry-concurring in munitions.

Lucy Wilson Benson

Robbie Robinson, who is Director of the Office of Munitions, is hard to streamline the process. I don't know that I can claim that Robbie his head and told him

to do and that seemed to be all that he needed. Maybe nobody paid much attention to it before. I don't know of any new procedures or new systems that are being undertaken. One does have to remember that an overwhelming percentage, a large percentage, of license applications are dealt with very rapidly. It's only those that involve what finally boils down to difficult political decisions that get hung up in the bureaucratic process. That reminds me of something that's very much on my mind. I had an interesting experience several years ago and I won't mention any names of aircraft producers or even the airplane or who was involved. But we almost made a decision about the export of an aircraft based entirely on wrong information about the capability of that aircraft. Some of the most senior people in this Government were involved, more senior than I, and I just happened to know about that aircraft, the one in the room who probably knew the least about the military at that point. The only reason I knew about it, at least about aircraft, was that I had had a briefing on that particular airplane the day before. And so the decision, which would have been a disaster, was averted -- not that it couldn't have been undecided -- but it would have been embarrassing. I wish that industry, whether it's aircraft or whatever, would do your best -- maybe you've already done very well, but do even better -- at getting across to the people in the Government, and I mean to include both the Department of Defense and the Department of State, just exactly what the capability of your system is. I don't know why that should be hard to do, but just yesterday a memo about another aircraft came across my desk out of the State Department, the Bureau of Political and Military Affairs -- and I hope they will forgive me if I point the finger -- which was wrong. I happened to know it was wrong because again I had had a briefing on this particular thing and we're not careful enough in making our analysis about whether or not to okay an export or a license for export. We're not careful enough about dealing with the numbers and with the actual capabilities of the equipment we're talking about. I think this is going to become more and more important, so I urge that on you.

Doctor V. Garber

Thank you, Lucy. Let me take a couple of questions from the floor, if there are any.

Q: I don't have a question, but as a member here, participating in this, a member of industry, I'd like to apologize to our hosts, to the international visitors, for one of the members of our community who took advantage of this forum in a very brash manner and in very poor taste to peddle his wares as a Beltway Bandit. We don't come to these meetings for that purpose and I apologize to the industry present.

Q: I would like to ask the question if anything is being done to implement the part of the President's proclamation that special consideration would be made for third country sales and initial sales to countries of products that were readily available on the market from other suppliers. That's been a problem with a lot of us in industry in the past, that we have been denied sales that accomplish nothing as far as an international policy was concerned, but deprived the sale from the U. S.

Lucy Wilson Benson

That remains a sticky wicket type of problem. I think it, too, is probably going to become less important in the next months. Let me sort of incorporate your question into a larger picture. The Administration was very determined. The President was very determined, to reduce, as you all know and I won't prolong this, to reduce the United States' share in the international arms market. Now, if you're going to do that, theoretically, it doesn't matter whether somebody can buy a piece of equipment from somebody else or not. We've had a great deal of difficulty, largely because many of the people within the Administration, in both the Defense Department and the State Department, have been very, very attached to the doctrine involved and much less attached to the practical considerations involved. I think you will see, because it's already very much there, a far more practical approach to the whole problem of the export of arms in the coming months and in the next Administration than you thought you saw in the past year. Now, it is true we have turned down a number of export proposals even though we knew they could be bought other places. You know, the whole theory which is not with this Administration but is also an older policy of arms exports to the Indian sub-continent, in spite of the fact we knew that the Indians would buy the British plane if we didn't let the enter the contest. We stuck to that through thick and thin. It became an enormous diplomatic problem, which I think maybe was a very good lesson in itself. I think this will lighten up. I think the, what I call the advocacies or the advocacy arguments about arms exports have really sort of almost disappeared and decisions are going to be made much more than sometimes they were on the basis of hard-nosed reality. I hope so.

Doctor V. Garber

Thank you. One more from the floor.

A: I'd like to ask Doctor Perry a question. European countries rely on each other for the production and source of arms production. They rely on each other in that respect as in wartime, and we rely on the United States as a source of arms production.

Can the United States say the same thing about Europe? Are you prepared to buy weapons, hardware, from European production lines or is it only paper, only drawings, only licenses that you want to buy?

William J. Perry

Yes, we are prepared to buy hardware from European production lines and are buying hardware from European production lines. We are not prepared to put our entire production base on crucial programs on production lines for the simple reason that European countries are not prepared, for understandable reasons, to support every diplomatic, every military use we want to make of those weapons. I think that was well illustrated in the Mid-East war when we couldn't even get bases to land our airplanes. So we may have different military objectives than Europe has, and therefore we cannot have our entire dependence for military needs on a European production line. With the \$40 or \$50 billion dollars a year procurement we're doing for military equipment, though, that still leaves an enormous potential for increased production in Europe, so the necessity for maintaining production bases and key weapons in the United States, in my mind, is not a significant deterrent to significantly increasing the production that we are getting from Europe.

Lucy Wilson Benson

I'd like to add to that. That's another two-way street. We're not willing to rely entirely and neither are the European countries, nor can you be. You have the same interests as we do. You may want to use your industries for political purposes, which we don't agree with. That shouldn't deter us from cooperating in arms production.

Doctor V. Garber

There was a related question to myself, since I participated in a transatlantic dialogue. As to reciprocal MOUs, what are the Europeans doing to overcome obstacles to the U. S.? We did discuss that issue and the response is the original one European obstacle. There are really no laws as such, but they are de facto discriminations at times that our European colleagues just address on a country-by-country basis and also pointed out that much is done in the way of FMS purchases, so when the bulk, a lot of the purchases are big dollars through FMS and only a few are left competitively, it is not fair to say, "Well, what you do competitively on a small amount - - -." We have had those dialogues and as I mentioned earlier, any legitimate concern and positive suggestion is welcome.

This is a specific question for Doctor Perry on assault breaker. Since it will pre-empt an armored thrust in the central region, how about a collaborative program with NATO Europe for immediate development and production for all sectors?

William J. Perry

We will be proposing a collaborative program on assault breaker. Right now, assault breaker is in the technology demonstration phase. If the United States decides to proceed on that as an engineering development program, we certainly will be looking at a collaborative way. It has just as much bearing on the North and South sector as it does on the Central Sector. We have already entered into some information-type discussions with our fellow Armament Directors on that system.

Doctor V. Garber

Lucy, is the ceiling on "major defense equipment" plan to be eliminated? It was recently raised from 25 to 35 million.

Lucy Wilson Benson

We've been working on that and I think it probably will go through. It has had a little trouble getting around some obstacles in the Congress, but I think eventually that will be achieved. It probably will, by the time it's achieved, not be adequate anyway and we will have realized what we tried to do first was to raise it to 50 million and got knocked down, and probably will end up having to do that anyway. I thought the question was going to be about the ceiling and what the ceiling on arms exports was going to be this year. I don't know, because we sent a proposal to the President and he sent it back for further study, so your guess is as good as mine.

Doctor V. Garber

Thank you. Bill, in maintaining our naval superiority that you stressed, Janes pointed out that the Soviets had the strongest navy on earth, and do you mean that we should re-acquire naval superiority?

William J. Perry

I think many of you have known that I have been a critic, a constructive critic and an objective critic of the U. S. defense capability and I don't just automatically assume that what we do or what we have is the best. I have to say that that statement

in Janes, if quoted correctly, is just ridiculous. The U. S. Navy, in a one-to-one contest with the Soviet Navy, would destroy it in a matter of a few days. I don't have any question in my mind on that point. Our submarines are better, capital ships are better, our destroyers are better, they don't even have a naval air. The one area that I'm concerned about, and I mentioned it in my thrust areas, is depending on where we're fighting the Soviet Navy, we may have to deal with land-based air. And land-based air, Soviet Union, could tip the balance against us. The biggest single deficiency I see in our naval forces today is not in the number of our ships or the capability of our ships, but the ability to deal with land-based air. If we project power close to the Soviet Union, we have to contend with that problem. That's why I place a great emphasis on the EGES program and on improving the anti-air capability of our destroyers.

Doctor V. Garber

Thank you. I actually have quite a few more questions, but as always, we have more questions than time to answer them. My Co-Chairman, Barry Shillito, suggests that this is a good time to take a break from the questions. He has some remarks, plus another thing he wants to officiate at.

Thank you very much, Bill and Lucy.

Barry Shillito

Thank you very much, V. We will try to get as many of the questions as we can that were not answered incorporated into the proceedings as we mentioned earlier.

I will make just a couple of recap remarks, none as regard today, a few as regard yesterday, and we're also going to ask each of our panel chairmen to briefly pull together a recap as regard his particular panel session, which also will be made a part of the proceedings.

First of all, I want to be sure that there is no misunderstanding as regard the discussion Walt LaBerge and I had yesterday relative to a few of the positions I took versus the positions that he took, in that while I express some frustrations and inferred that we're making progress, glacial progress -- I didn't use that word, but I might have -- I want to also emphasize, having been a part of the past Administration, that this Administration has made more progress, by far, than any preceding Administration relative to major accomplishments as regard our NATO cooperative efforts, and I'm talking about this United States Administration. Indeed, this must apply, also, to our Allied Administrations. At the same time, I think we have the right to be desirous of more speed, all of us.

Bob Komer made a couple of comments that we felt were outstanding, unless you are building tank guns. He said that we've all known about the situation that has taken place over the past 20 years, as far as the Soviet Union is concerned, that interestingly they have developed and practiced the U. S. theoretical concepts. What they're doing is a mirror image of our theoretical concepts. That we're not doing enough. Why? We don't seem to grasp the strategic realities within the Allies; the Allies look at the threat differently. Nationalism relative to hardware is applicable. Escalating costs of oil, in his mind, is doing more to hurt us strategically than is the USSR.

All three of our speakers, I think we would have to say, were outstanding in every way. General Lawson, Mr. Komer, and Congressman Daniel.

As a part of Session II, the International Defense Cooperation. Doctor LaBerge emphasized the fact that we are working together, and indeed we are. That stands out, as I said, in everything that every one of us have recognized over the past few years. The bureaucracies, indeed, are getting together. And mutual trust is developing and, indeed, that is true. And of course, we have been very, very candid. I think we would all say that.

Mr. Barnes made clear the point that we needed more in the way of R&D sharing. He talked about the U. K. budget and the international flavoring as regard the U. K. budget and that we must find mutually acceptable solutions. He talked about the balance of trade and, of course, the greater links that are necessary between, particularly, the Allies, and he emphasized in his instance, the U. K. and the U. S.

Doctor Eberhard had several outstanding points, that I can't elaborate on in toto, all quite good. He emphasized the need for sharing the political risks and political know-how and he talked about the usefulness of the IEPG, and the less-developed countries' need for involvement to a greater degree. And the fact that we have to be flexible, we have to tie to a changing environment, and, of course, that joint programs should be given preference; that the family of weapons must tie, in all instances, to the best possible technology.

General Matre talked about the increase of the French budgetary outlays; the fact that new programs are tough, even on a national basis, let alone on a collaborative basis. He talked about the U. S. competitive approach and how this causes delay as far as working with the cooperative approach of our Allies, and that national priorities often overshadow the collective needs. He talked about technology transfer; he talked about the third country sales problem, and I'll come back to that in a moment; he also emphasized the fact that our mutual understanding is indeed

improving rapidly and that contractors' involvement must tie in more in the early stages of many of our program efforts.

Moving to the parliamentary and legislative responsibility, which was chaired by Doctor LaBerge, and Walter emphasized the need for solutions and not too much in the way of criticism. I would say to Bill and Walter and other people who are a part of Administrations in power, you have to expect one hell of a lot of criticism if you're in the Executive Branch of any country and that just seems to be the way it works, even though we'd all like to hope that we're giving or pushing forward as many solutions as we can. Walt emphasized the fact that the Alliance still has some problems as far as communicating as effectively as it might and that the defense ministers and the parliamentarians must get their acts together, and he emphasized that for the benefit of his panel, which was a parliamentary and legislative panel.

Bill Whitehurst talked about the congressional powers in the United States, as far as raising armies and navies and how this is spelled out on the dais of the Armed Services Committee, which so many of us are quite familiar with, and how this was put there and why this was put there. The defense shifts; the fact that many shifts have had an impact on our Allies, our Allies getting confused by our vacillations; and he made a significant proposal -- that we must know about advance agreements in advance to Congress, but that we need an RSI-type treaty, a NATO treaty, to approach our mutual problems and to bring about their solutions. This was brought up several times during the discussions.

Minister Damm talked about NATO solidarity and how this is now the time for this to be renewed. He made the proposal that CNAD should monitor all programs and maintain the off-set compensations necessary, either in military or civilian goods. They should handle this over a five-year plan, in his mind, and he suggested different compensations for different countries, and that the European countries need a more visible sign of U. S. transatlantic cooperation and the two-way street.

Mr. Wall from the United Kingdom talked about the fact that European industry is frightened. They are concerned about their relationships with the United States and they don't want to be sub-contractors of the United States. He made a point that I think many of us realize but often don't think about. That's the fact that we're becoming somewhat mesmerized with the Middle East and sometimes forget portions of the rest of the world. And he said as an aside, he mentioned the southern part of the African continent and he talked about the raw materials that so many of us need to sustain our national securities and that the Soviet Union is indeed looking at that part of the world. He emphasized that point, that we cannot allow ourselves to forget it, going through platinum and chromium and gold and manganese and on and

on and on. He made the proposal that we need an integrated, international staff that would bring together all cooperation necessary at the requirements stage. This is essential - he emphasized this point because he said for the first time in history these various countries are planning to fight together, if necessary. Countries normally don't plan ahead to fight together, and we're actually doing this for the first time.

Mr. de Vries was critical as regard treaties and elaborate mechanisms, concentrated on the problems as regard talent and the need for better deployment of forces as regard NATO. He gave a lot of attention to the time problems as regard NATO decisions and the material or material and production problems.

The industry's view on cooperation led to a number of points, chaired by Doctor Yarymovych.

Mr. Savoyen mentioned the expanding market motivations beyond NATO being necessary, heavily tied his comments to third country solutions; the fact that we need to find such solutions. And the third country sales issue kept coming up over and over. He took exception with Ambassador Komer's statement that RSI should have priority over national and commercial motivations. He says this is an abnormal thing that cannot be accomplished in a normal way. He said that as a proposal we need long-term business industry-to-industry cooperative efforts. This is tough to implement because of the different acquisition systems--Europe never sure that the U. S. associate that they team with is the company that is going to be selected in the United States and so forth, but we need some way to get at this long-term business industry-to-industry association.

Mr. LeNoble had many outstanding comments that I can't go into in great detail, but his chart on NATO, the Western European Union, the EURO groups, IEPG, ECC and so forth, I think are something that we all ought to take into consideration and think about. He gave great attention to international cooperation, starting in the up-stream phase, engineering and the R&D phase, the development phase, great detail about direct procurement, not Americanizing and not Europeanizing, etc. We need to bring his thoughts together in a number of ways.

Professor Madelung gave attention to the various forms, i.e., the MOUs, the family of weapons, co-production, and so forth, and made it clear that we don't apply these forms in industry because we like them or because they're convenient, and that this is something that we're willing to do even though it's very tough, it's damn tough. We prefer to apply our own design on the European side. This ties to our "rights to survival position," in his words. We have to keep an open mind in the procurement of advanced equipment from the U. S. This was emphasized by Professor Madelung. And the defense industry is not familiar with some of the points

that were made as far as the speed with which our bureaucracies are now moving.

Mr. Allan had a number of positive actions, too, with regard to NATO, and spelled out in great detail as to how well the NATO operations are progressing. He made a proposal not unlike one other, that we need a joint NATO staff to establish the joint NATO requirements and if we can't have this, we should not be surprised with national solutions as they are now structured. We have to have this joint NATO requirements staff. He looked at this as a long-term thing and in the meantime suggested in the short-term that we have selected candidate programs small enough to avoid controversy and went into a number of programs.

Mr. Greenwood of British Aerospace talked about partnerships, several partnerships, but he made a point that I think is quite sound. A proposal that is quite sound. That under the auspices of the Government without too much government involvement, minimal, the companies with common causes should form joint companies to carry out projects. International joint companies to carry out projects, and that this is one way to bring about a significant offsetting of some of the kinds of problems that we presently find ourselves faced with -- economic problems that we find ourselves faced with. And, indeed, this can be done and we have not done enough of it. The Government should give more information upstream, by MOUs, etc. etc., and that bureaucratic supervision should be kept to a minimum.

And that was yesterday. I will not go into today in the interest of time.

I would wind up my comments by saying that we are just very appreciative of the efforts of all persons who played such a major role in putting on this conference. We hope that you benefited from it.

We are going to ask that again, Chairmen prepare highlights of their particular sessions.

We, of course, appreciate very much the attendees involvement in this conference.

Two things stood out, some in my comments, some in the comments of today, many in the comments yesterday. One was we don't know how to handle offsets or compensation; the other that we don't know how to handle third country sales. And we have to have the same pattern as to how we do the third country sale job. Lucy and others talked about this today and apparently a lot of people still aren't convinced that we're completely on track in this particular area.

I want to turn this mike over for just a moment to the President of Martin-Marietta and the Chairman of the Board of Directors of A.D.P.A., Mr. Tom Pownall.

Tom Pownall

Thank you, Barry. Madam Secretary, Doctor Perry, ladies and gentlemen. Secretary Benson, it is my great pleasure to say a word about your service to the country and to those of us in this room, of the United States and our Allies from abroad, also.

I think we can all remember that the ink was not dry and the ammonia had not stopped emitting from the paper on which was contained the instructional policy with regard to foreign military sales, when Secretary Benson presented it herself to the industry en masse, the point being that from the very beginning she has met the issue head on. We all stood at that time with some fear and trembling of the fact that the whole world had just about come to a screeching halt. We just about panicked on our first cruise. But between that time and this time, we have come to recognize that you came aboard at a time when things were a bit difficult in a variety of ways and you've helped to guide us through a lot of sticky-wickets.

We think that the way that you have even-handedly and with level head managed this system in this time is quite remarkable. In addition to that, you have also lent yourself to meetings of this sort on any number of occasions, which have been of great benefit to us and we hope some benefit to you. And this is another one of those opportunities and we do sincerely thank you for the contribution that you've made to all of us and to the United States.

I suppose this may seem a bit pedestrian, finally, when all of the momentos of your tour in office have stopped coming in, but we are proud to be among the early ones and we would like to leave with you this memento of our great appreciation for the work that you have done, this medalion which I give to you in the name of the American Defense Preparedness Association and all of its members. Thank you very much.

Lucy Wilson Benson

Thank you all very, very much. You've caught me quite unprepared and overwhelmed.

I might just say that I mentioned earlier about what one remembers out of past service and what one forgets out of past service. I will never forget one of the really greatest parts of

working for the U. S. Government which hasn't really to do with the Government at all, but it has to do with industry. I have enjoyed immensely, and profited immensely from my associations with this organization and other organizations and from the many conversations that I've had with you and your colleagues in your various companies. I've enjoyed equally as much working with the military.

It has been a very interesting time. I am thoroughly convinced that there is nothing, as Bill said, that we can't do when we decide we want to do it. I hope you will keep on with the very good work this organization does, because it is essential to the Government to have all of you working with us and helping us and telling us when we're wrong. And I think, if anything, you underdo that. If anything, you are too timid about -- well, I haven't noticed too much timidity with me, but maybe I was easier to tell off than some others. Anyway, I think you should be more forthright, more direct with the members of Government, more explicit about your problems. There's no earthly reason why some of the problems that you and we have have to exist at all, as a matter of fact. Some of them are very simple to straighten out, some are very complicated, but they can be straightened out. And I urge you to increase your contacts with members of the Government, particularly with the Executive Branch. Business does quite well with the Hill, but you really don't do all that well with dealing with the Executive Branch. I think you tend to deal at too low a level with the staff of departments, instead of the principal members of the departments, and I think you will find that if you insist on seeing people, and you should not be timid about doing so when you have a legitimate problem -- and you do have many legitimate problems -- that you will get farther. And so I urge you to develop your techniques of working with the Executive Branch of the Government.

Thank you very much.

Doctor V. Garber

Thank you again, Lucy, and congratulations.

I'd like to thank all of the participants, especially our foreign guests. I think we have learned mutually from each other. I would like to thank my colleagues and all of the industry members, from whom we get suggestions and dialogue like this. I think it is always in our mutual interest.

I would like to now close the Conference and look forward to working with you in the future. Thank you.

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